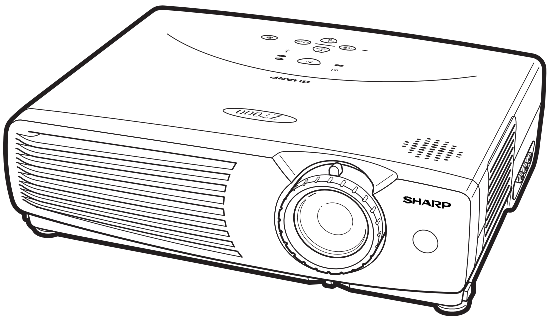
SHARP

SERVICE MANUAL
SERVICE-ANLEITUNG

S31Q7PG-C20XU



LCD PROJECTOR
LCD PROJEKTOR

PG-C20XU
PG-C20XE

MODELS
MODELLE

ATTACHMENT ADAPTOR
ANSCHLUSSADAPTER
AN-Z7T

In the interests of user-safety (Required by safety regulations in some countries) the set should be restored to its original condition and only parts identical to those specified should be used.

Im Interesse der Benutzersicherheit (erforderliche Sicherheitsregeln in einigen Ländern) muß das Gerät in seinen Originalzustand gebracht werden. Außerdem dürfen für die spezifizierten Bauteile nur identische Teile verwendet werden.

SHARP CORPORATION

CONTENTS

INHALT

Specifications

Product type	LCD Projector
Model	PG-C20XU/XE
Video system	PAL / PAL 60 / PAL- M / PAL- N / SECAM / NTSC 3.58 / NTSC 4.43 / DTV 480P
Display method	LCD panel X 3,RGB optical shutter method
LCD panel	Panel size:0.9" (22.9mm) (13.9 [H] X 18.5 [W] mm))
	Display method:Translucent TN liquid crystal panel
	Drive method:TFT (Thin Film Transistor)Active Matrix panel
	No.of dots:786,432 dots (1,024 [H] X 768 [V])
Lens	1 – 1.2X zoom lens, F2.3 – 2.6, f = 36.0 – 43.2 mm
Projection lamp	DC 150 W lamp
Contrast ratio	500:1
Video input signal	RCA Connector:VIDEO,composite video,1.0 Vp-p,sync negative,75 Ω terminated
	RCA Connector:AUDIO,0.5 Vrms more than 22 kΩ (stereo)
S-video input signal	4-pin Mini DIN connector
	Y (luminance signal):1.0 Vp-p,sync negative,75 Ω terminated
	C (chrominance signal):Burst 0.286 Vp-p,75 Ω terminated
Horizontal resolution	580 TV lines (video input)
Audio output	1.0 W (monaural)
Computer RGB input signal	15-PIN MINI D-SUB CONNECTOR (COMPUTER INPUT 1 port,COMPUTER OUTPUT port):
	RGB separate/composite sync/sync on green type analog input:0 – 0.7 Vp-p,positive, 75 Ω terminated
	STEREO MINIJACK:AUDIO,0.5 Vrms,more than 22 kΩ (stereo)
	HORIZONTAL SYNC.SIGNAL:TTL level (positive/negative)or composite sync (Apple only)
	VERTICAL SYNC.SIGNAL:Same as above
Pixel clock	12 – 108 MHz
Vertical frequency	43 – 85 Hz
Horizontal frequency	15 – 80 kHz
Computer control signal	9-pin Mini DIN female connector (RS-232C port)
Speaker system	$1\frac{7}{64}$" (2.8 cm) round
Rated voltage	AC 100 – 240 V
Input current	2.6 A
Rated frequency	50/60 Hz
Power consumption	230 W (Selecting "OFF" in the "Power Save Mode".)
	200 W (Selecting "ON" in the "Power Save Mode".)
Operating temperature	41 °F to 95 °F (+ 5 °C to + 35 °C)
Storage temperature	− 4 °F to 140 °F (− 20 °C to + 60 °C)
Cabinet	Plastic
I/R carrier frequency	38 kHz
Dimensions (approx.)	$10\frac{15}{64}$" (W) X $2\frac{29}{32}$" (H) X $8\frac{5}{32}$" (D)(260 X 74 X 207 mm)(main body only)
	$10\frac{15}{64}$" (W) X $3\frac{15}{64}$" (H) X $8\frac{5}{32}$" (D)(260 X 82 X 207 mm)(including adjustment feet and projecting parts)
Weight (approx.)	5.73 lbs.(2.6 kg)
Supplied accessories	Remote control, Two AAA size batteries, Power cord (11' 10" ,3.6 m), Computer RGB cable (9' 10" ,3 m), Computer audio cable (9' 10", 3 m), PS/2 mouse control cable (3' 3", 1 m), USB mouse control cable (4' 11" ,1.5 m), DIN-D-sub RS-232C cable ($6\frac{45}{64}$" ,15 cm), Remote mouse receiver, Extra air filter, Lens cap (attached), Lens cap strap, CD-ROM,
Replacement parts	Lamp unit (Lamp/cage module) (BQC-PGC20X//1), Remote control (RRMCG1613CESA), AAA size batteries, Power cord (CACCU5013DE01 (PG-C20XU), QACCV4002CEZZ (PG-C20XE), QACCB5024CENA (PG-C20XE)), Computer RGB cable (QCNWG0002CEZZ), Computer audio cable (QCNW-4870CEZZ), PS/2 mouse control cable (QCNW-5113CEZZ), USB mouse control cable (QCNW-5680CEZZ), DIN-D-sub RS-232C cable (QCNW-5288CEZZ), Remote mouse receiver (RUNTK0694CEZZ), Air filter (PFILD0123CEZZ), Lens cap (PCOVZ1095CEKA), Lens cap strap (UBNDT0013CEZZ), CD-ROM (UDSKA0029CEN1 (PG-C20XU), UDSKA0048CEN1 (PG-C20XE)), LCD projector operation manual (TINS-7204CEZZ (PG-C20XU), TINS-7271CEZZ (PG-C20XE)), LCD projector quick reference guide (TINS-7205CEZZ (PG-C20XU), TINS-7272CEZZ (PG-C20XE), TINS-7284CEZZ (PG-C20XE), TINS-7285CEZZ (PG-C20XE))

This SHARP projector uses LCD (Liquid Crystal Display)panels.These very sophisticated panels contain 786,432 pixels (RGB)TFTs (Thin Film Transistors).As with any high technology electronic equipment such as large screen TVs,video systems and video cameras,there are certain acceptable tolerances that the equipment must conform to.

This unit has some inactive TFTs within acceptable tolerances which may result in illuminated or inactive dots on the picture screen.This will not affect the picture quality or the life expectancy of the unit.
If you have any questions about this matter,please call toll free 1-888-GO-SHARP (1-888-467-4277). U.S.A.ONLY

Specifications are subject to change without notice.

IMPORTANT SERVICE SAFETY NOTES (for USA)

■ **Service work should be performed only by qualified service technicians who are thoroughly familiar with all safety checks and servicing guidelines as follows:**

WARNING

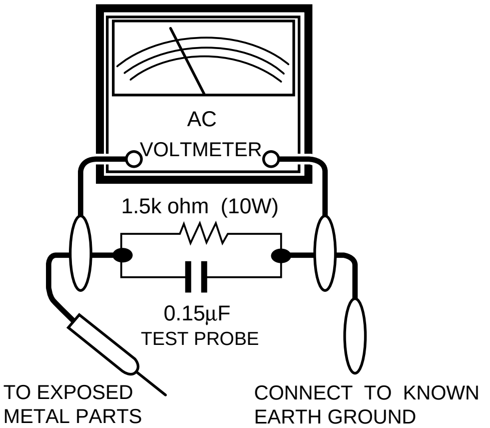
1. For continued safety, no modification of any circuit should be attempted.
2. Disconnect AC power before servicing.

BEFORE RETURNING THE PROJECTOR: (Fire & Shock Hazard)

Before returning the projector to the user, perform the following safety checks:

1. Inspect lead wires are not pinched between the chassis and other metal parts of the projector.
2. Inspect all protective devices such as non-metallic control knobs, insulating materials, cabinet backs, adjustment and compartment covers or shields, isolation resistor-capacity networks, mechanical insulators, etc.
3. To be sure that no shock hazard exists, check for current leakage in the following manner:

- Plug the AC cord directly into a 120-volt AC outlet, (Do not use an isolation transformer for this test).
- Using two clip leads, connect a 1.5k ohm, 10 watt resistor paralleled by a 0.15µF capacitor in parallel between all exposed metal cabinet parts and earth ground.
- Use an AC voltmeter with sensitivity of 5000 ohm per volt., or higher, sensitivity to measure the AC voltage drop across the resistor (See Diagram).
- All checks must be repeated with the AC plug connection reversed. (If necessary, a non-polarized adapter plug must be used only for the purpose of completing these checks.)
  Any reading of 0.3 volts RMS (this corresponds to 0.2 milliamp. AC.) or more is excessive and indicates a potential shock hazard which must be corrected before returning the unit to the owner.



SAFETY NOTICE

Many electrical and mechanical parts in LCD Projector have special safety-related characteristics.
These characteristics are often not evident from visual inspection, nor can protection afforded by them be necessarily increased by using replacement components rated for higher voltage, wattage, etc.
Replacement parts which have these special safety characteristics are identified in this manual; electrical components having such features are identified by "⚠" and shaded areas in the Replacement Parts Lists and Schematic Diagrams. For continued protection, replacement parts must be identical to those used in the original circuit. The use of a substitute replacement parts which do not have the same safety characteristics as the factory recommended replacement parts shown in this service manual, may create shock, fire or other hazards.

AVIS POUR LA SECURITE

De nombreuses pièces, électriques et mécaniques, dans les projecteur à LCD présentent des caractéristiques spéciales relatives à la sécurité, qui ne sont souvent pas évidentes à vue.
Le degré de protection ne peut pas être nécessairement augmentée en utilisant des pièces de remplacement étalonnées pour haute tension, puissance, etc.
Les pièces de remplacement qui présentent ces caractéristiques sont identifiées dans ce manuel; les pièces électriques qui présentent ces particularités sont identifiées par la marque "⚠" et hachurées dans la liste des pièces de remplacement et les diagrammes schématiques. Pour assurer la protection, ces pièces doivent être identiques à celles utilisées dans le circuit d'origine. L'utilisation de pièces qui n'ont pas les mêmes caractéristiques que les pièces recommandées par l'usine, indiquées dans ce manuel, peut provoquer des électrocutions, incendies ou autres accidents.

WARNING: The bimetallic component has the primary conductive side exposed. Be very careful in handling this component when the power is on.

AVERTISSEMENT: La composante bimétallique dispose du conducteur primaire dénudé. Faire attention lors de la manipulation de cette composante sous tension.

NOTE TO SERVICE PERSONNEL

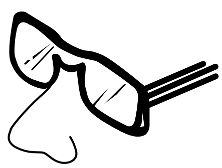
UV-RADIATION PRECAUTION

The light source, UHP lamp, in the LCD projector emits small amounts of UV-Radiation.

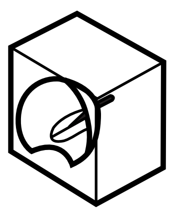
AVOID DIRECT EYE AND SKIN EXPOSURE.

To ensure safety please adhere to the following:

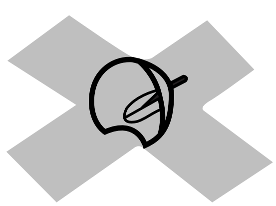
1. Be sure to wear sun-glasses when servicing the projector with the lamp turned “on” and the top enclosure removed.



2. Do not operate the lamp outside of the lamp housing.



3. Do not operate for more than 2 hours with the enclosure removed.



UV-Radiation and Medium Pressure Lamp Precautions

1. Be sure to disconnect the AC plug when replacing the lamp.
2. Allow one hour for the unit to cool down before servicing.
3. Replace only with same type lamp. Type BQC-PGC20X//1 rated 100V/200W.
4. The lamp emits small amounts of UV-Radiation, avoid direct-eye contact.
5. The medium pressure lamp involves a risk of explosion. Be sure to follow installation instructions described below and handle the lamp with care.

NOTE POUR LE PERSONNEL D’ENTRETIEN

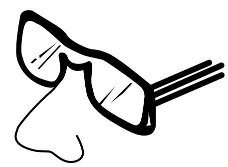
PRECAUTION POUR LES RADIATIONS UV

La source de lumière, la lampe UHP, dans le projecteur LCD émet de petites quantités de radiation UV.

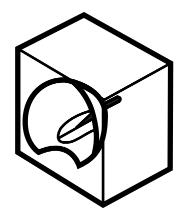
EVITEZ TOUTE EXPOSITION DIRECTE DES YEUX ET DE LA PEAU.

Pour votre sécurité, nous vous prions de respecter les points suivants:

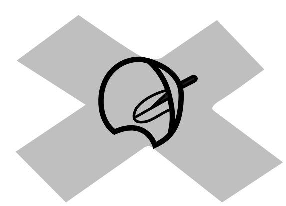
1. Toujours porter des lunettes de soleil lors d’un entretien du projecteur avec la lampe allumée et le haut du coffret retiré.



2. Ne pas faire fonctionner la lampe à l’extérieur du boîtier de lampe.



3. Ne pas faire fonctionner plus de 2 heures avec le coffret retiré.



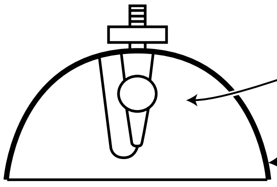
Précautions pour les radiations UV et la lampe moyenne pression

1. Toujours débrancher la fiche AC lors du remplacement de la lampe.
2. Laisser l’unité refroidir pendant une heure avant de procéder à l’entretien.
3. Ne remplacer qu’avec une lampe du même type. Type BQC-PGC20X//1, caractéristique 100V/200W.
4. La lampe émet de petites quantités de radiation UV- éviter tout contact direct avec les yeux.
5. La lampe moyenne pression implique un risque d’explosion. Toujours suivre les instructions d’installation décrites ci-dessous et manipuler la lampe avec soin.

UV-RADIATION PRECAUTION (Continued)

Lamp Replacement

Note:
Since the lamp reaches a very high temperature during units operation replacement of the lamp should be done at least one hour after the power has been turned off. (to allow the lamp to cool off.) Installing the new lamp, make sure not to touch the lamp (bulb) replace the lamp by holding its reflector ②.
[Use original replacement only.]



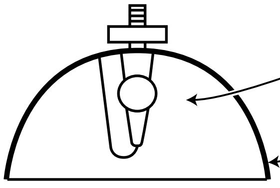
DANGER ! — Never turn the power on without the lamp to avoid electric-shock or damage of the devices since the stabilizer generates high voltages at its start.

Since small amounts of UV-radiation are emitted from an opening between the exhaust fans, it is recommended to place the cap of the optional lens on the opening during servicing to avoid eye and skin exposure.

PRECAUTION POUR LES RADIATIONS UV (Suite)

Remplacement de la lampe

Remarque:
Comme la lampe devient très chaude pendant le fonctionnement de l'unité, son remplacement ne doit être effectué au moins une heure après avoir coupé l'alimentation (pour permettre à la lampe de refroidir). En installant la nouvelle lampe, s'assurer de ne pas toucher la lampe (ampoule). Remplacer la lampe en tenant son réflecteur ②.
[N'utiliser qu'un remplacement d'origine.]



DANGER ! — Ne jamais mettre sous tension sans la lampe pour éviter un choc électrique ou des dommages des appareils car le stabilisateur génère de hautes tensions à sa mise en route.

Comme de petites quantités de radiation UV sont émises par une ouverture entre les ventilateurs aspirants, il est recommandé de placer le capuchon de l'optique optionnelle sur l'ouverture pendant l'entretien pour éviter une exposition des yeux et la peau.

WARNING: High brightness light source, do not stare into the beam of light, or view directly. Be especially careful that children do not stare directly in to the beam of light.

WARNING: TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS UNIT TO MOISTURE OR WET LOCATIONS.

CAUTION

RISK OF ELECTRIC SHOCK.
DO NOT REMOVE SCREWS
EXCEPT SPECIFIED USER
SERVICE SCREW

CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK,
DO NOT REMOVE CABINET.
NO USER-SERVICEABLE PARTS EXCEPT LAMP UNIT.
REFER SERVICING TO QUALIFIED SERVICE
PERSONNEL.

The lighting flash with arrowhead within a triangle is intended to tell the user that parts inside the product are risk of electric shock to persons.

The exclamation point within a triangle is intended to tell the user that important operating and servicing instructions are in the manual with the projector.

CAUTION
(INLET Unit)

15A 250V

For continued protection against a risk of fire, replace only with same type 15A 250V fuse. (F1701)

CAUTION
(INLET Unit)

1A 250V

For continued protection against a risk of fire, replace only with same type 1A 250V fuse. (F1702)

CAUTION
(POWER Unit)

2A 250V

For continued protection against a risk of fire, replace only with same type P100A, ANZEN DENGU, 2A, 250V 103°C fuse.(TF701)

AVERTISSEMENT: Source lumineuse de grande intensité. Ne pas fixer le faisceau lumineux ou le regarder directement. Veiller particulièrement à éviter que les enfants ne fixent directement le faisceau lumineux.

AVERTISSEMENT: AFIN D'EVITER TOUT RISQUE D'INCENDIE OU D'ELECTROCUTION, NE PAS PLACER CET APPAREIL DANS UN ENDROIT HUMIDE OU MOUILLE.

ATTENTION

RISQUE
D'ELECTROCUTION NE
PASRETIRER LES VIS, A
L'EXCEPTION DES VIS DE
REPARATION UTILISATEUR
SPECIFIEES

ATTENTION: POUR EVITER TOUT RISQUE
D'ELECTROCUTION, NE PAS RETIRER LE CAPOT.
AUCUNE DES PIECES INTERIEURES N'EST REPARABLE
PAR L'UTILISATEUR, A L'EXCEPTION DE L'UNITE DE
LAMPE. POUR TOUTE REPARATION, S'ADRESSER A UN
TECHNICIEN D'ENTRETIEN QUALIFIE.

L'éclair terminé d'une flèche à l'intérieur d'un triangle indique à l'utilisateur que les pi'eces se trouvant dans l'appareil sont susceptibles de provoquer une décharge électrique.

Le point d'exclamation à l'intérieur d'un triangle indique à l'utilisateur que les instructions de fonctionnement et d'entretien sont détaillées dans les documents fournis avec le projecteur.

PRECAUTION
(Unite d'admission)

15A 250V

Pour une protection continue contre les risques d'incendie, ne remplacer qu'avec un fusible 15A 250V du même type. (F1701)

PRECAUTION
(Unite d'admission)

1A 250V

Pour une protection continue contre les risques d'incendie, ne remplacer qu'avec un fusible 1A 250V du même type. (F1702)

PRECAUTION
(Unité de PUTSSANCE)

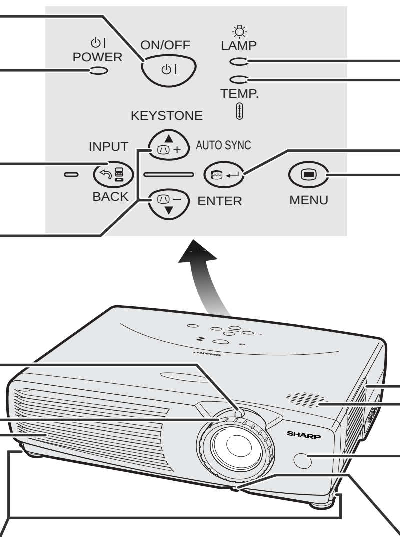
2A 250V

Pour une protection continue contre un risques d'incendie, ne remplacer qu'avec un fusible P100A, ANZEN DENGU 2A 250V, 103°C du même type. (TF701)

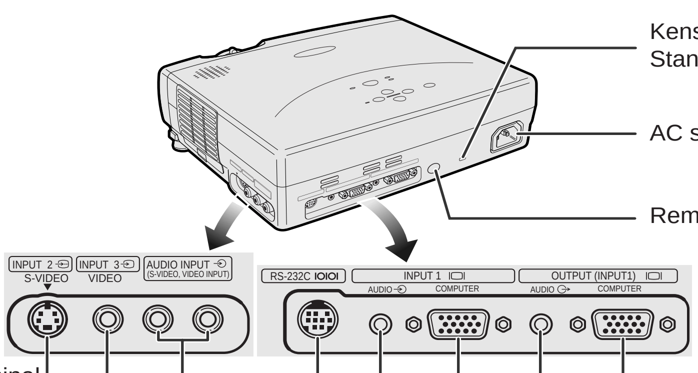
Location of Controls

Projector

Front and Top View

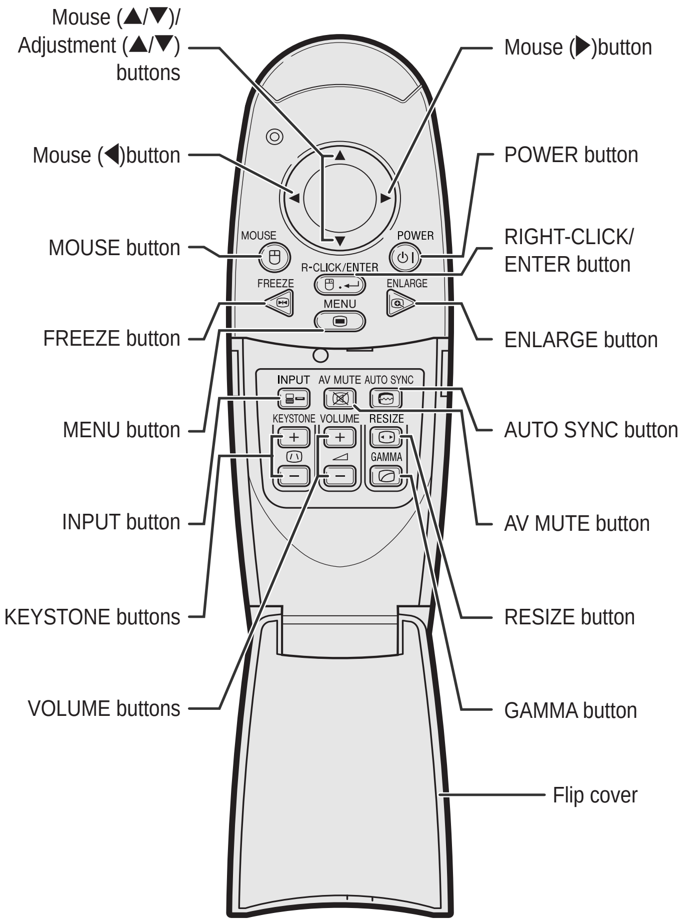


Side and Rear View

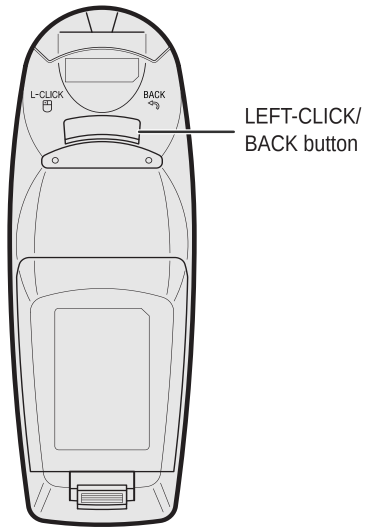


Remote Control

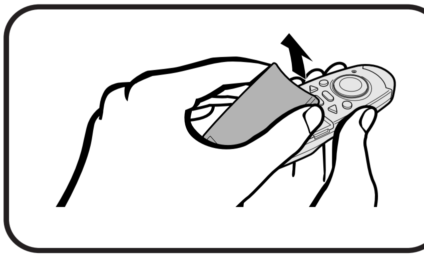
Front View



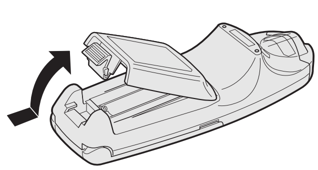
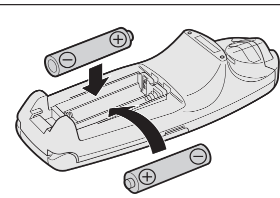
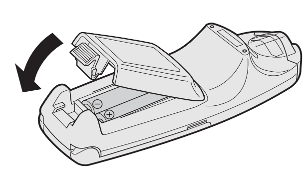
Rear View



Opening the Flip Cover



Inserting the Batteries

1 **Press the tab and lift open the battery cover in the direction of the arrow.**	**2** **Insert two AAA size batteries,making sure their polarities match the + and - marks inside the battery compartment.**	**3** **Insert the tabs on the end of the battery cover into their slots and press the cover into position.**
		

NOTE

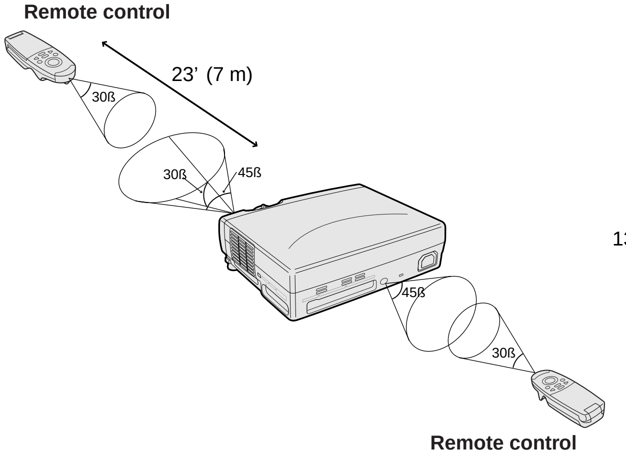
- If the remote control gets wet, wipe it dry immediately.
- Avoid excessive heat and humidity.
- If you will not be using the remote control for a long time, remove the batteries.
- Do not mix new and old or different types of batteries.
- There are operations that can only be carried out by remote control. Handle the remote control carefully.

Remote Control/Mouse Receiver Positioning

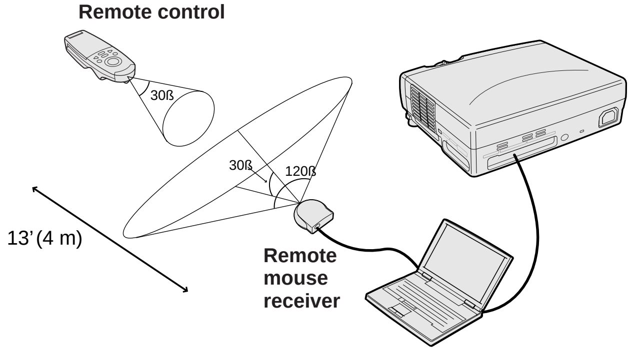
- The remote control can be used to control the projector within the ranges shown below.
- The remote mouse receiver can be used with the remote control to control the mouse functions of a connected computer within the ranges shown below.

NOTE
- The signal from the remote control can be reflected off a screen for easy operation. However, the effective distance of the signal may differ due to the screen material.

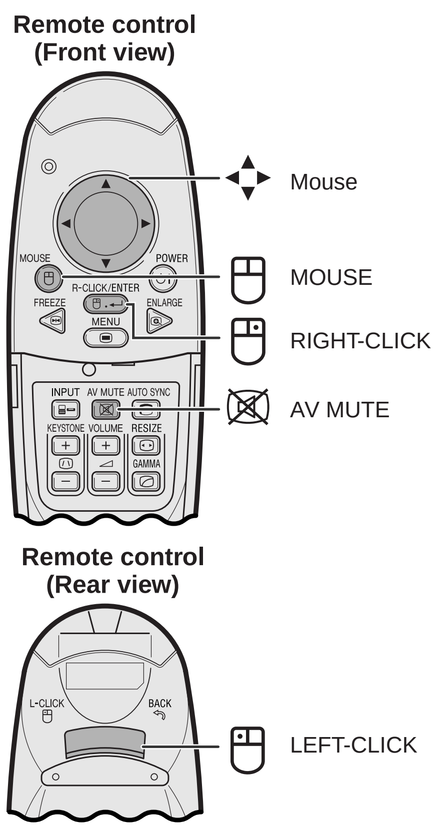
Controlling the Projector



Using the Wireless Mouse



Effective buttons in MOUSE mode



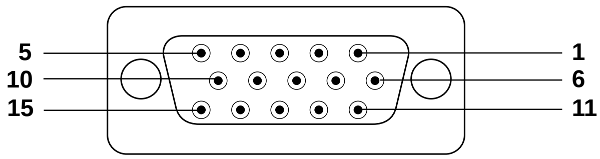
Using as a Wireless Mouse

- When **MOUSE** is pressed, the buttons on the remote control light up and the remote control enters MOUSE mode.
- During MOUSE mode, the cursor can be used as the pointer. MOUSE mode is for about ten seconds while the buttons are lighting.
- When **MENU** or **ENLARGE** is pressed, MOUSE mode is released to the normal mode.
- Be sure the supplied remote mouse receiver is connected to your computer.

NOTE
- The wireless mouse may not operate correctly if your computer serial port is not correctly set up. Refer to the computer s operation manual for details of setting up/ installing the mouse driver.
- For one-button mouse systems, use either the **LEFT-CLICK** or **RIGHT-CLICK** button.

Connection Pin Assignments

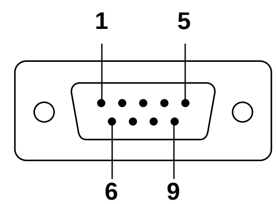
COMPUTER INPUT 1 Port: 15-pin mini D-sub female connector



Computer Input
Analog

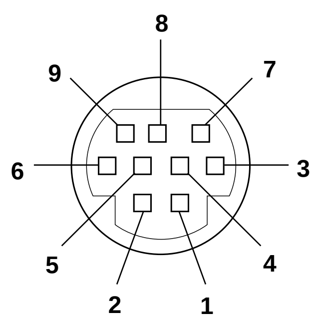
1. Video input (red)
2. Video input
   (green/sync on green)
3. Video input (blue)
4. Not connected
5. Composite sync
6. GND (red)
7. GND (green/sync on green)
8. GND (blue)
9. Not connected
10. Not connected
11. GND
12. Bi-directional data
13. Horizontal sync signal
14. Vertical sync signal
15. Data clock

RS-232C Port: 9-pin D-sub male connector of the DIN-D-sub RS-232C cable



Pin No.	Signal	Name	I/O	Reference
1				Not connected
2	RD	Receive Data	Input	Connected to internal circuit
3	SD	Send Data	Output	Connected to internal circuit
4				Not connected
5	SG	Signal Ground		Connected to internal circuit
6				Not connected
7				Not connected
8				Not connected
9				Not connected

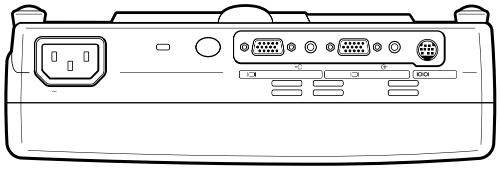
RS-232C Terminal: 9-pin Mini DIN female connector



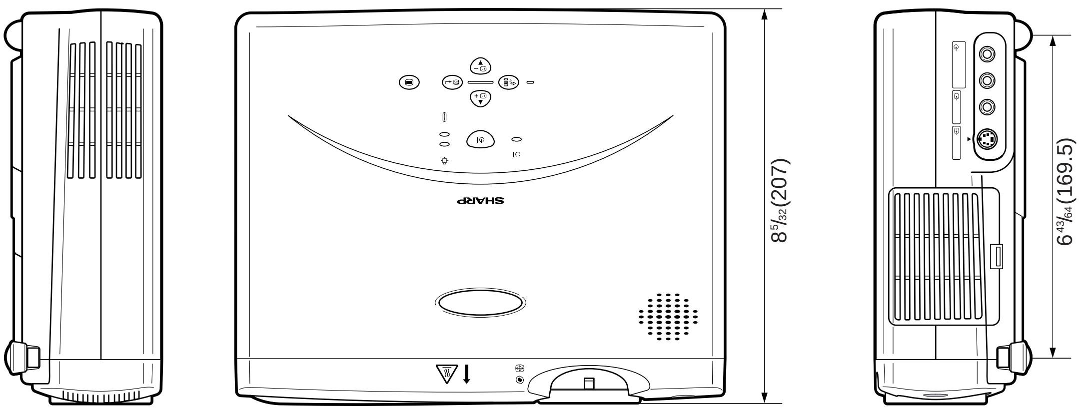
Pin No.	Signal	Name	I/O	Reference
1				Not connected
2	RD	Receive Data	Input	Connected to internal circuit
3	SD	Send Data	Output	Connected to internal circuit
4				Not connected
5	SG	Signal Ground		Connected to internal circuit
6				Not connected
7				Not connected
8				Not connected
9				Not connected

Dimensions

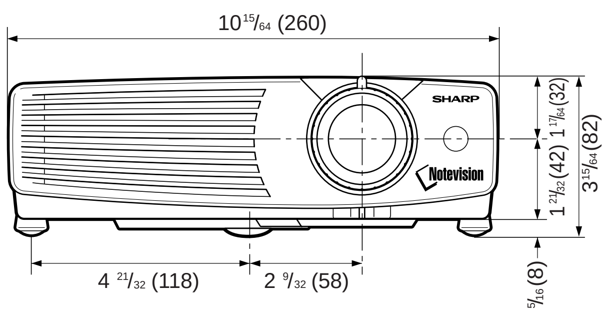
Rear View



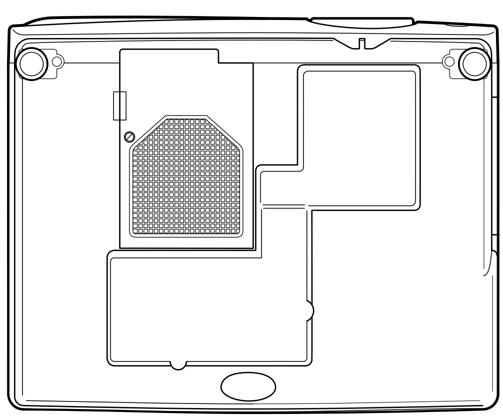
Top View



Side View



Front View



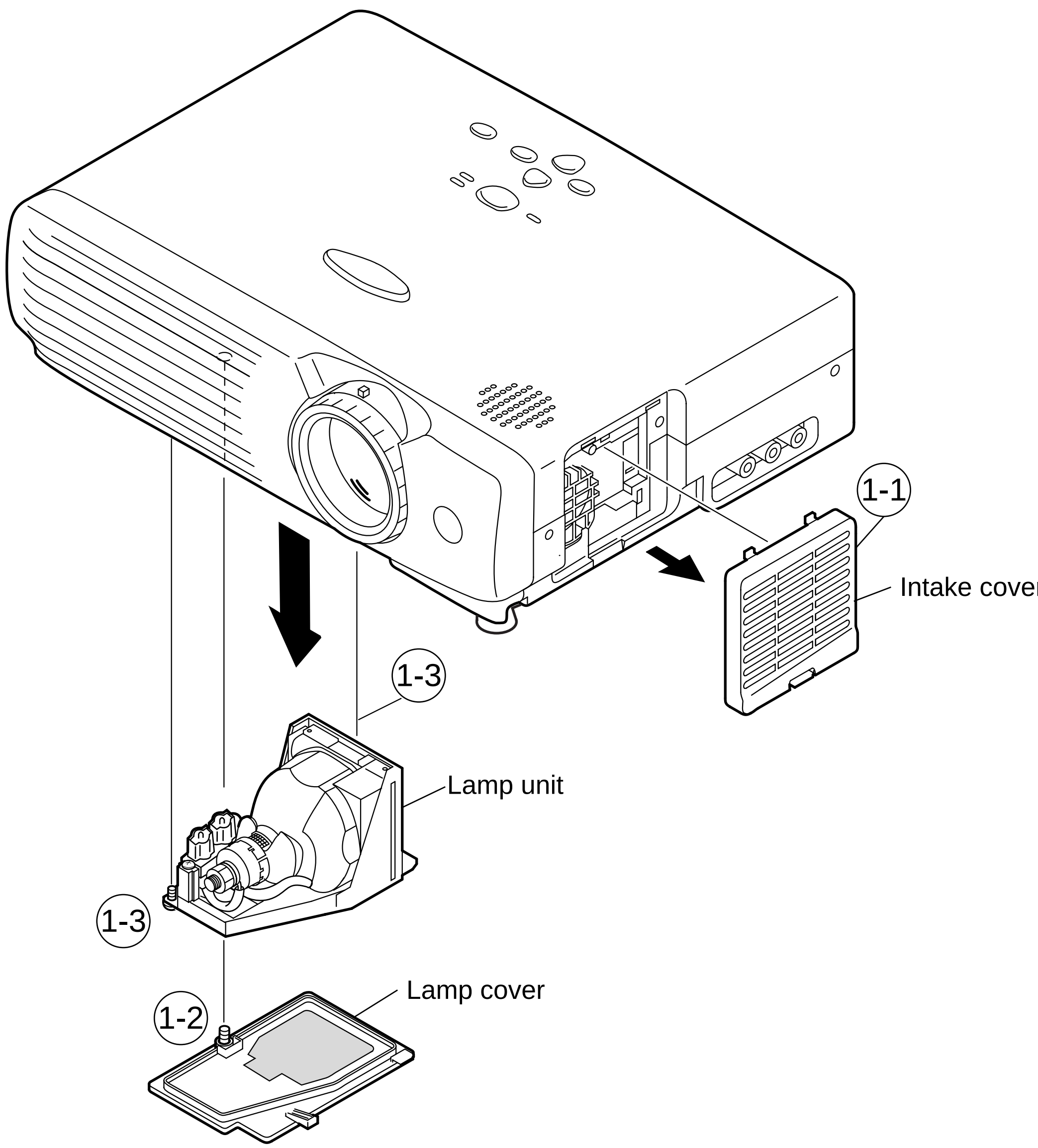
Bottom View

Unit: inches (mm)

REMOVING OF MAJOR PARTS

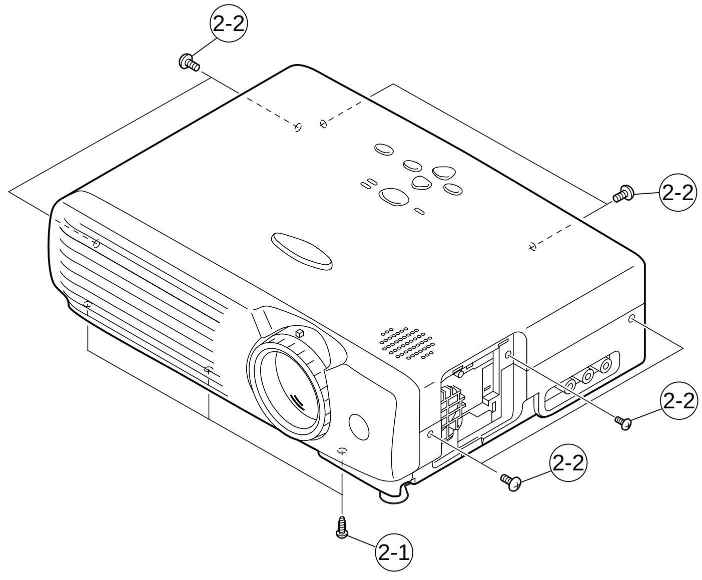
1. Removing the intake cover and the lamp unit.

1-1. Detach the intake cover.
1-2. Remove the one lock screw (silver) from the lamp cover and detach the lamp cover.
1-3. Remove the two lock screws (silver) from the lamp unit and detach the lamp unit.

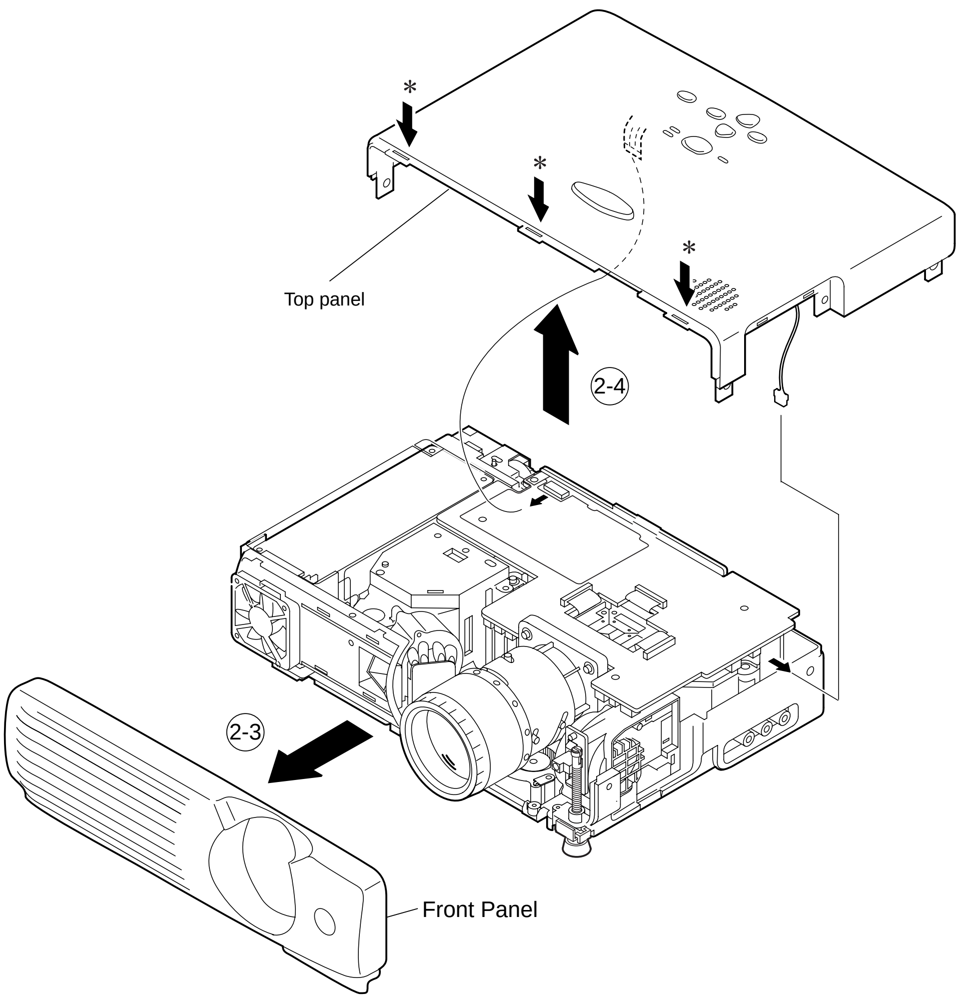


2. Removing the front and top panels

2-1. Remove the three lock screws (silver) from the front panel.
2-2. Remove the seven lock screws (silver) from the top panel.

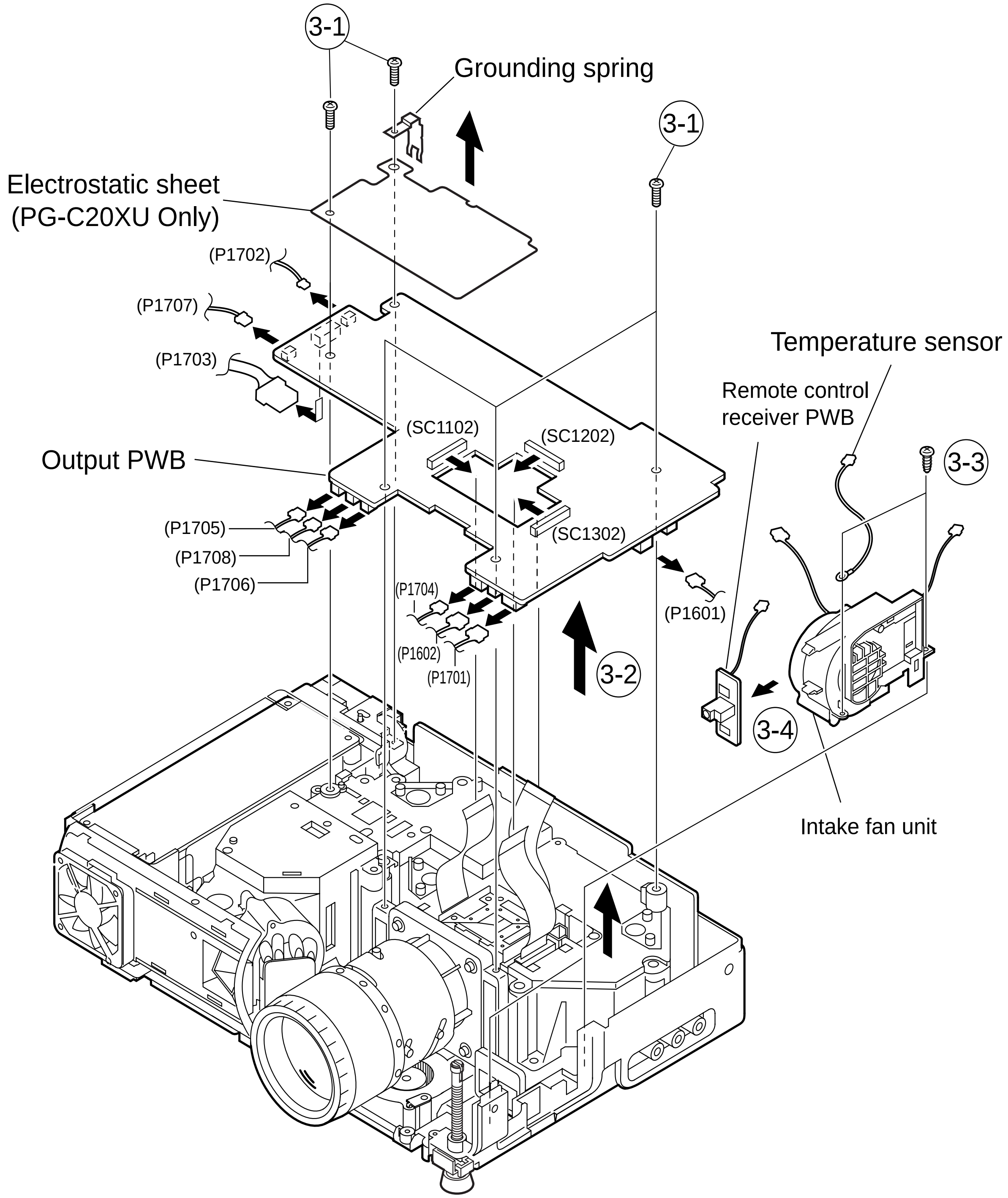


2-3. Press the ✻-marked spots of the top panel to unhook the claws, and detach the top panel.
2-4. Slowly lift the top panel, disconnect the connectors from the control panel and speaker, and lift up the top panel.



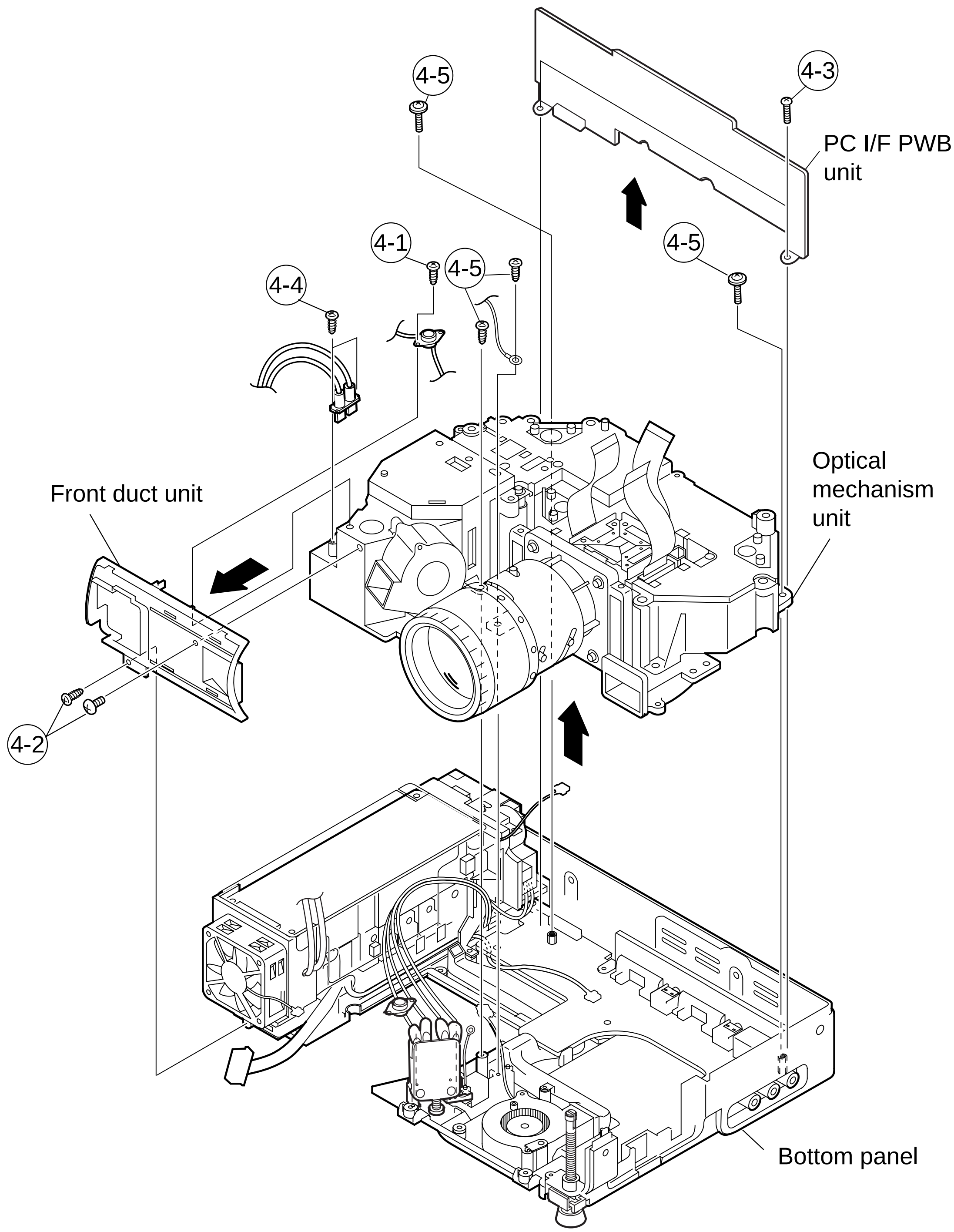
3. Removing the output PWB unit, remote control receiver PWB unit and intake fan unit

3-1. Remove the five lock screws (yellow) from the output PWB unit. Remove the grounding spring and the electrostatic sheet (PG-C20XU only).
3-2. Lift the output PWB unit, disconnect the connectors and lift up the output PWB unit.
3-3. Remove the two lock screws (black) from the intake fan unit and detach both the intake fan unit and the temperature sensor.
3-4. Unhook the claws of the intake fan unit off the remote control receiver PWB unit, and detach this unit.



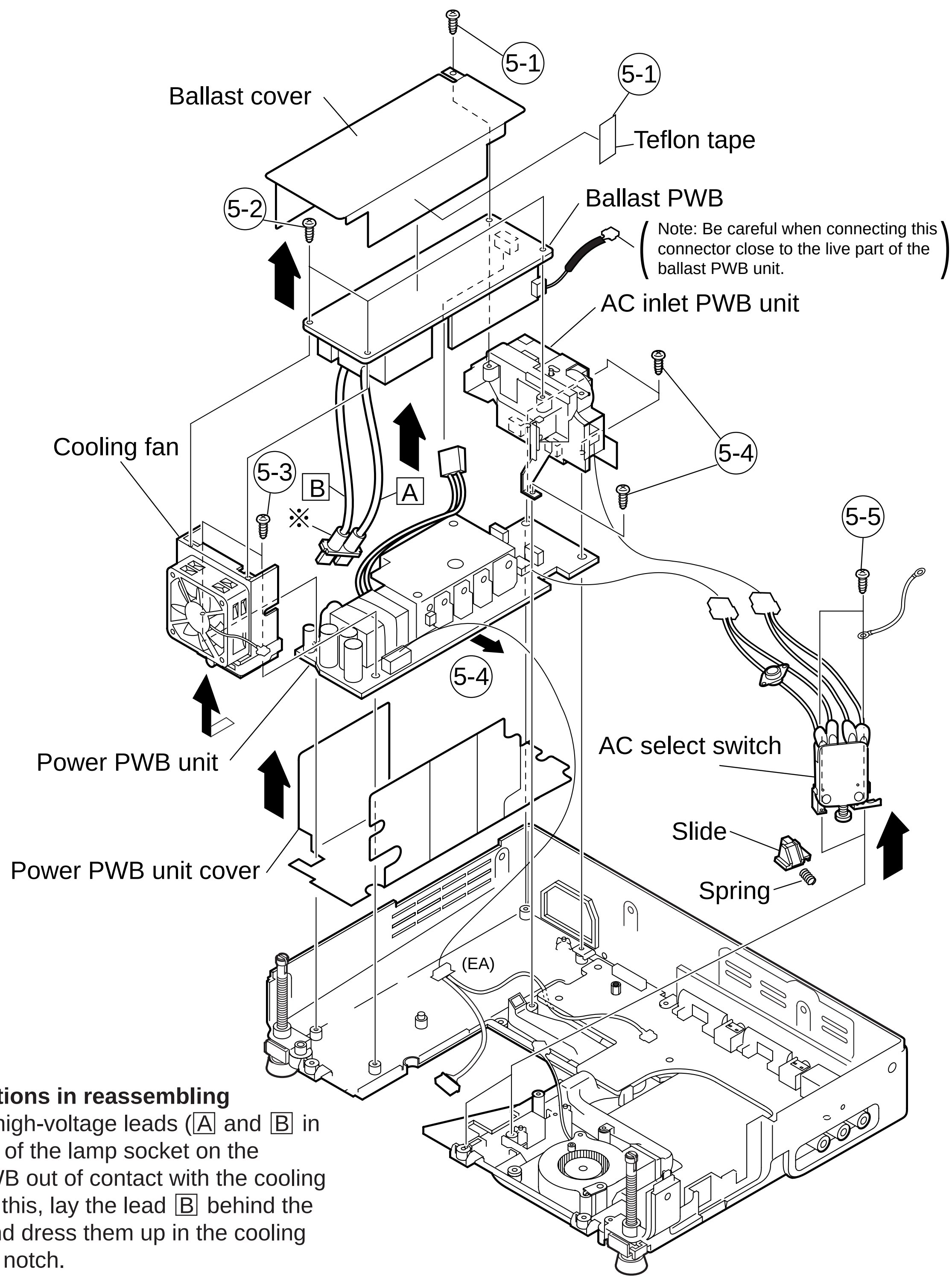
4. Removing the front duct unit, PC I/F PWB units, and optical mechanism unit

4-1. Remove the lock screw (silver) from the bimetal and detach the bimetal.
4-2. Remove the two lock screws (one in black, the other in silver) from the front duct unit and detach the front duct unit.
4-3. Remove the two lock screws (yellow) from the PC I/F PWB unit. Detach this unit from above.
4-4. Remove the two lock screws (silver) from the lamp socket holder and detach the lamp socket holder.
4-5. Remove the four lock screws (two in black, two in yellow) from the optical mechanism unit and detach the optical mechanism unit from above.



5. Removing the ballast/power/AC inlet PWB unit, cooling fan and AC select switch

5-1. Remove the lock screw (yellow or silver) from the ballast cover. Peel the Teflon tape that secures the lead wires on the ballast cover. Detach the ballast cover.
5-2. Remove the three lock screws (yellow or silver) from the ballast PWB unit. Disconnect the connectors from the power PWB unit and detach the ballast PWB unit.
5-3. Remove the two lock screws (silver) from the cooling fan/power PWB unit and detach the cooling fan unit.
5-4. Remove the three lock screws (silver) from the AC inlet/power PWB unit. Disconnect the AC select switch connectors and the power PWB connector (EA). Detach the AC inlet PWB unit, power PWB unit and power PWB unit cover.
5-5. Remove the two lock screws (yellow) from the AC select switch and detach the switch, slide and spring.



※ Precautions in reassembling
Keep the high-voltage leads (A and B in the figure) of the lamp socket on the ballast PWB out of contact with the cooling fan. To do this, lay the lead B behind the lead A and dress them up in the cooling fan holder notch.

6. Removing the connecting terminals/3-dimensional Y/C separation PWB unit assembly

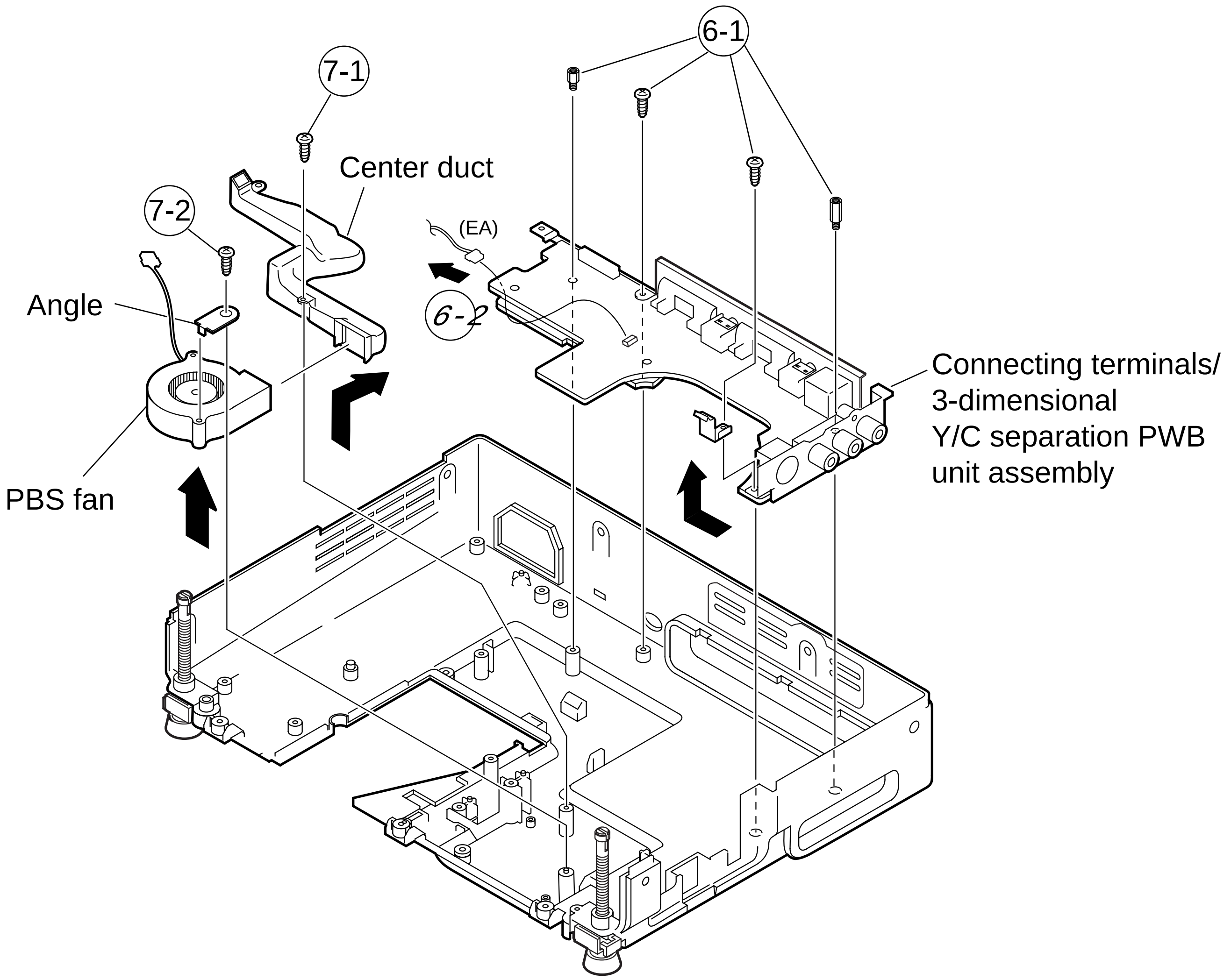
6-1. Remove the two lock screws (yellow) and the two supports from the connecting terminals/3-dimensional Y/C separation PWB unit assembly. Slide the PWB unit and draw the terminals out of the bottom plate.

6-2. Disconnect the connector (EA) from the connecting terminals PWB unit.

7. Removing the center duct and the PBS fan

7-1. Remove the one lock screw (yellow) from the center duct and detach the center duct.

7-2. Remove the one lock screw (yellow) from the PBS fan and detach the angle and the PBS fan.



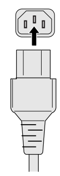
Resetting the TOTAL LAMP TIMER

● Resetting the total lamp timer

When replacing the lamp, reset the total lamp timer in the procedure below.

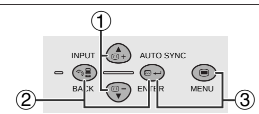
1 Connect the power cord.

Plug the power cord into the AC socket of the projector.

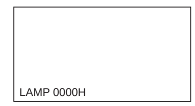


2 Reset the lamp timer.

① Press **KEYSTONE ▲** and **KEYSTONE ▼** on the projector at the same time.
② Press **INPUT** and **AUTO SYNC** on the projector at the same time.
③ Press **AUTO SYNC** and **MENU** at the same time until unit comes on.



LAMP 0000H is displayed, indicating that the lamp timer is reset.



● Light source (lamp)

The lamp used for light source has a service life of about 1,000 hours. If the total operating time exceeds 900 hours, replace the lamp with new one (separately sold) as soon as possible. However, if the image becomes dim or the colors get less crisp even before the total operating time does not exceeds 900 hours, also replace the lamp. The lamp's total operating time can be checked on the screen. If noticeable color irregularities are found after replacing the lamp, make the color irregularity correction on page 28.

⚠ CAUTION

- Intense light hazard. Do not attempt to look into the aper ture and lens while the pr ojector is operating.

NOTE

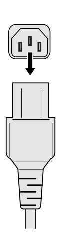
- As the usage environment can vary significantly, the projector lamp may not operate for 1,000 hours.
- "1,000 hours" above indicates average life span and should be used for r eference only. This is different than the warranty period.
- For safety, the power will not be tur ned on from the fourth times when turning on the power without changing the lamp after use for 1,000 hours.

Maintenance Indicator	Condition	Problem	Possible Solution
TEMPERATURE WARNING indicator	The internal temperature is abnor mally high.	• Blocked air intake.	• Relocate the projector to an area with proper ventilation.
		• Clogged air filter.	• Clean the filter.
		• Cooling fan br eakdown. • Internal circuit failure.	• Take the projector to your nearest Authorized Sharp Industrial LCD Products Dealer or Service Center for repair.
	The indicator flashes in red.	• Cooling down.	• Wait until the indicator stops flashing and turns off.
LAMP REPLACEMENT indicator	The lamp does not illuminate.	• Burnt-out lamp. • Lamp cir cuit failure.	• Carefully replace the lamp. • Take the projector to your nearest Authorized Sharp Industrial LCD Products Dealer or Service Center for repair.
	The lamp requires replacement.	• Lamp has been used for over 900 hours.	
POWER indicator	The indicator flashes in red when the pr ojector is on.	• The filter cover is open.	• Securely install the filter cover.

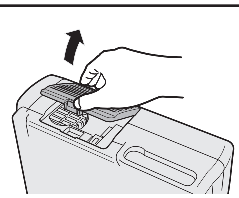
● Replacing the air filter

Just when replacing the lamp, replace also the air filter with the one that comes with the lamp replacement kit.

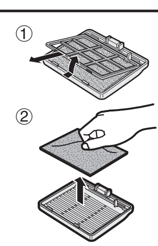
1.Disconnect the power cord.
Unplug the power cord from the AC socket.



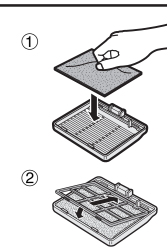
2.Remove the filter cover.
Turn over the projector. Press the tab and remove the filter cover in the direc- tion of the arrow.



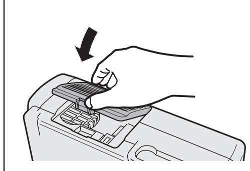
3.Remove the air filter.
① Remove the air filter stopper.
② Remove the air filter.



4.Replace the air filter.
① Put the new air filter into position.
② Put the air filter stopper back into position.

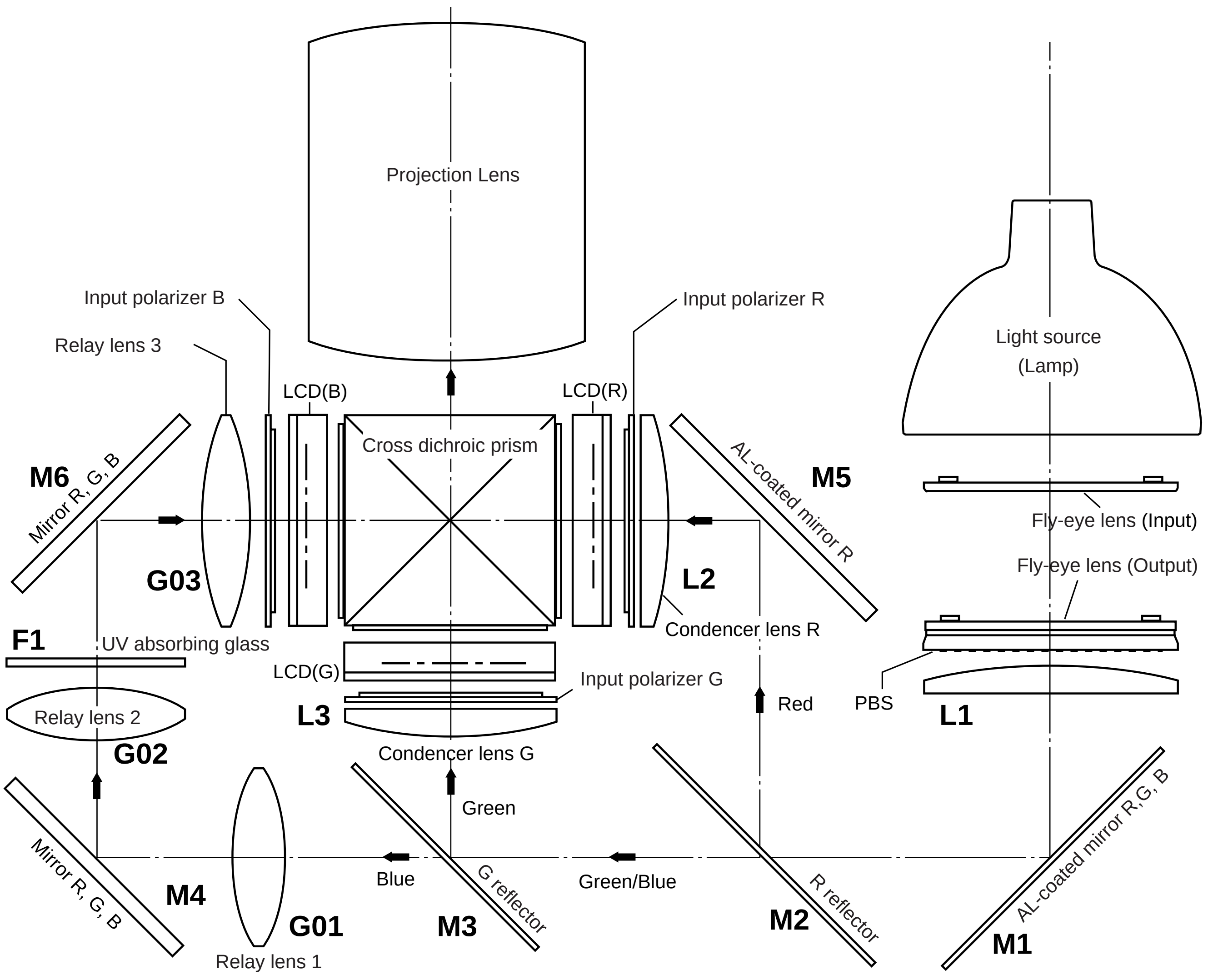


5.Replace the filter cover.
Insert the tab on the end of the filter cover into the filter cover opening and press the filter cover into position.



THE OPTICAL UNIT OUTLINE

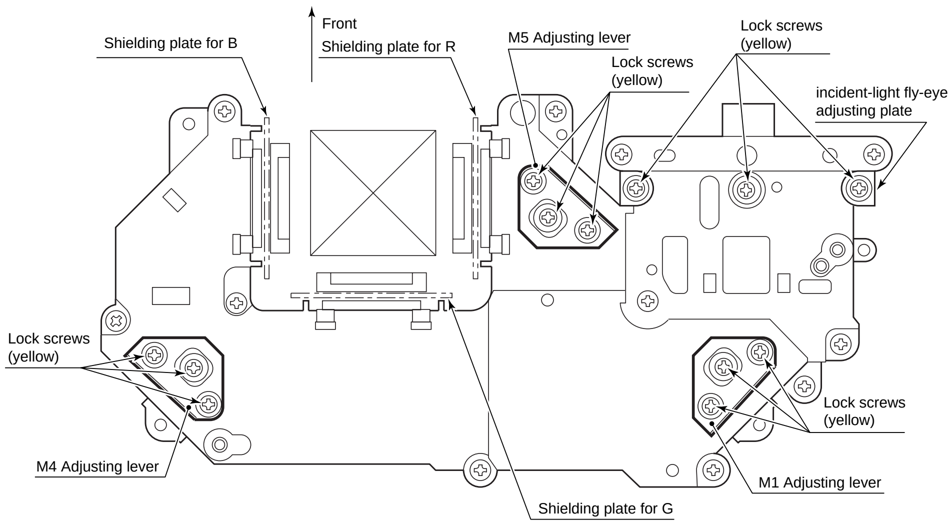
Layout for proper setup of the optical components and parts (top view)



Adjusting the mirrors

This adjustment is needed when any of the optical parts of the optical mechanism has been replaced.

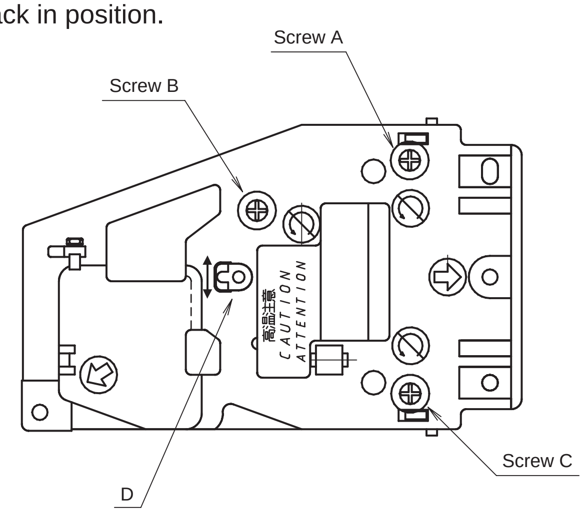
1. Disconnect the flat cables from all the LCD panels.
2. Light up the lamp.
3. Project a white-light image and check to see if there is any color tint in any direction. If any, loosen the incident-light fly-eye adjusting plate lock screws and readjust the fly-eye to get the image uniformly whitish. Tighten up the lock screws.
4. If by any chance the above step 3 fails, use the M1, M4 and M5 adjusting levers.
5. Before moving the M5 adjusting lever, shield the G and B color beams. (For shielding them, use reflective sheets that reflect the incident lights.)
6. Loosen the adjusting lever lock screws, make adjustments, and tighten up the lock screws.
7. Before moving the M4 adjusting lever, shield the R and G color beams.



Correcting color irregularities on white-only screen when replacing the lamp

If color irregularities are found at the right and left on a white-only screen after replacing the lamp, it is necessary to readjust the optical axis of the new lamp. Take the following steps.

1. Open the lamp cover and loosen the screws A, B and C at the bottom of the lamp.
2. Using a screwdriver or the like, move the U-shaped groove at the window D in the arrow direction.
3. Temporarily fix the screws A, B and C, close the lamp cover, and check the white-only screen again for color irregularities.
4. Repeat the above steps 1, 2 and 3 until there will be no color irregularities. Now tighten up the screws A, B and C.
5. Finally secure the lamp cover back in position.

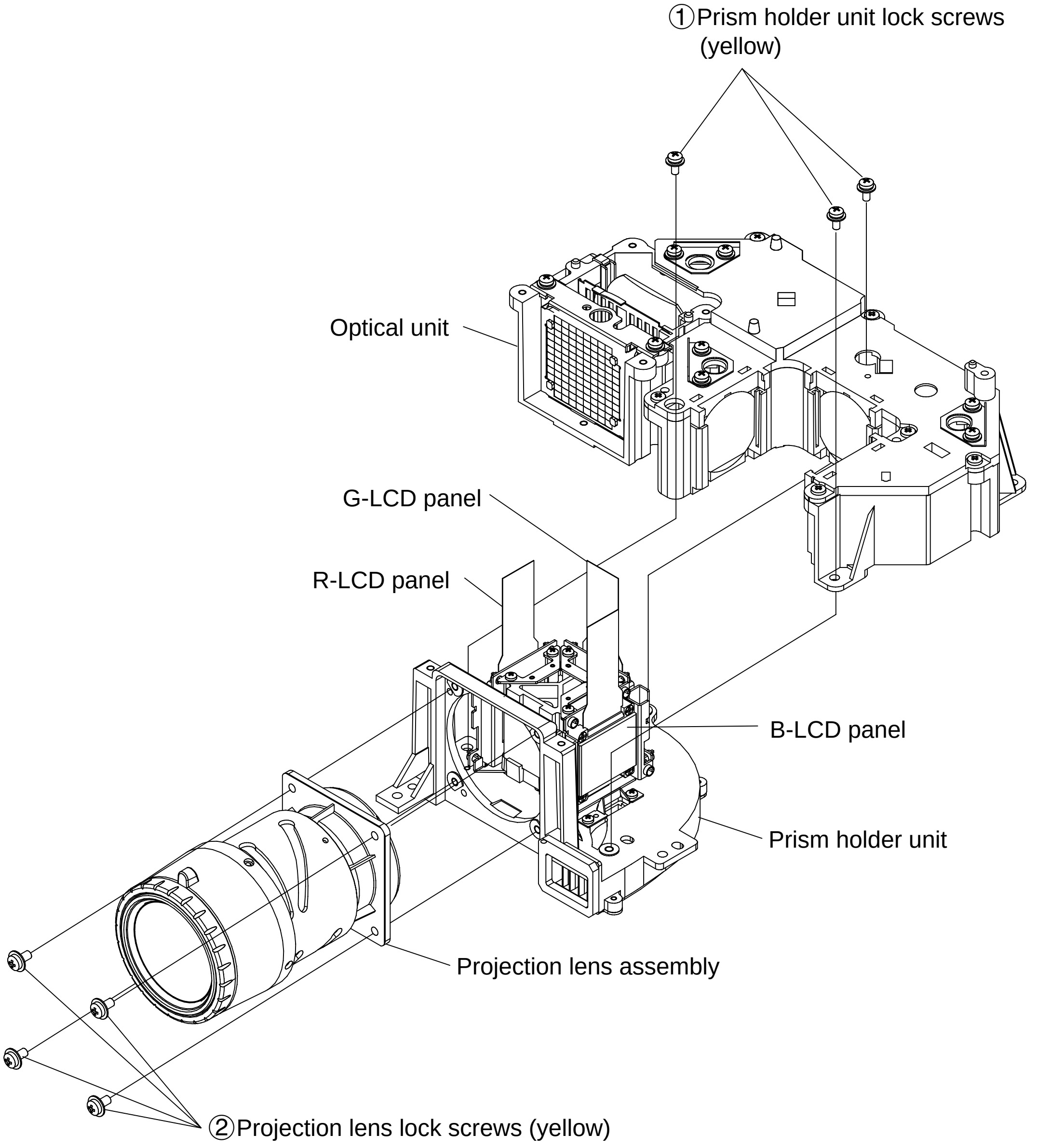


Lamp assembly (bottom view)

Replacing the prism holder unit

1. Remove the three lock screws, and take the prism holder unit and the projection lens assembly out of the optical unit.
2. Remove the four lock screws, separate the prism holder unit and the projection lens assembly from each other.
3. Replace the prism holder unit with new one. Take the above steps 1 and 2 in reverse order.

Note: Even if just one of the LCD panels is defective, it is necessary to replace the entire prism holder unit. Do not replace just the defective LCD panel only.



ELECTRICAL ADJUSTMENT

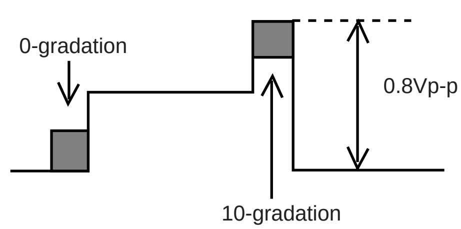
Hook up a signal generator, or a DOSV or Mac personal computer to the projector in order to feed the signals specified in the Adjusting conditions.

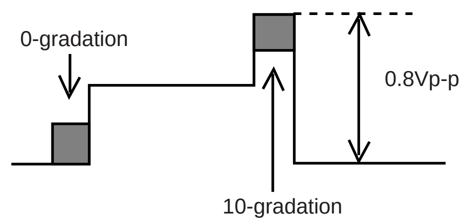
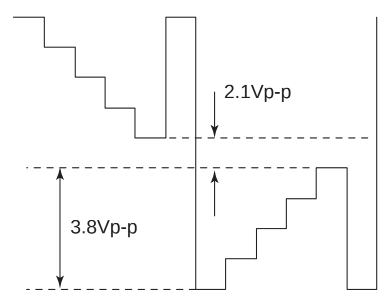
ADJUSTMENT PRECAUTIONS

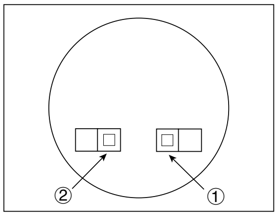
① Precautions for initializing
It takes 5 seconds to get the memory initialized and the initial settings rewritten. To go through the initialization, the onscreen display background on the process menu screen turns red and the message "INITIALIZE" appears onscreen for 5 seconds after pressing the specified key. Finally turn off the AC power (unplug the power cord).

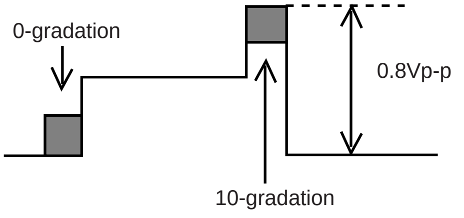
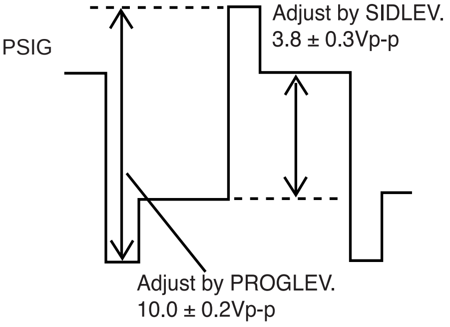
② Initial factory settings (S4, S5)
It takes 5 seconds to get the initial factory settings written. Do not turn off the main power during this procedure. To ensure this waiting time, "S4" or "S5" appears on the onscreen display for 5 seconds. When this sign disappears, you can keep on the power or turn it off.

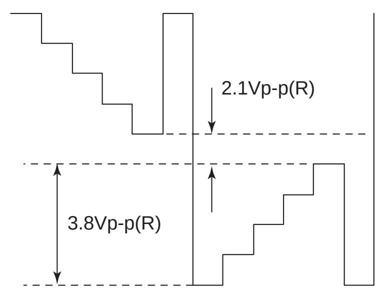
③ Video adjustment
Be careful not to cut off the signals during the video adjustment.

No.	Adjusting point	Adjusting conditions	Adjusting procedure
1	**EEPROM initialization**	1. Turn on the power (with the lamp on) and warm up the set for 15 minutes. 2. Select the following group, sub-group and subject. Group : Option Sub-group: EEPROM Initialize Subject : Initialize Start	● Make the following settings. Press SW1601 to call the process mode. Initialize the EEPROM by execution of Initialize Start. (After the execution of Initialize Start, the EEPROM will not be initialized unless the power is once turned off.)
2	**Brightness adjustment**	1. Feed the XGA 10-step signal. 2. Select the following group, sub-group and subjects. Group : Adjust PC Image Sub-group: AD Subject : R-Bright (In R adjustment) G-Bright (In G adjustment) B-Bright (In B adjustment) 3. Connect the synchroscope (0.2V/div.) to the following TPs. In R adjustment TP1403 In G adjustment TP1402 In B adjustment TP1401	● Adjust the setting just until the color tone level 0 starts moving. 

No.	Adjusting point	Adjusting conditions	Adjusting procedure
3	**Drive adjustment**	1. Feed the XGA 10-step signal. 2. Select the following group, sub-group and subjects. Group : Adjust PC Image Sub-group: AD Subject : R-Contrast (In R adjustment) G-Contrast (In G adjustment) B-Contrast (In B adjustment) 3. Connect the synchroscope (0.2V/div.) to the following TPs. In R adjustment TP1403 In G adjustment TP1402 In B adjustment TP1401	● First reach a setting where the color tone level 10 gets saturated. Then decrease the setting by one point. 
4	**Panel input signal amplitude adjustment**	1. Select the following group, sub-group and subjects. Group : Adjust PC image Sub-group: CXA2111R Subject : AMP-R-GAIN (In R adjustment) AMP-R-BLK (In R adjustment) AMP-G-GAIN (In G adjustment) AMP-G-BLK (In G adjustment) AMP-B-GAIN (IN B adjustment) AMP-B-BLK (IN B adjustment) 2. Connect the synchroscope to the following TPs. In R adjustment TP1101 In G adjustment TP1201 In B adjustment TP1301 3. Feed the XGA 10-step signal.	1.Select AMP-R-GAIN and adjust the signal amplitude to 3.8 ± 0.1. Select 0.1Vp-p. 2.Select AMP-R-BLK and adjust the white-white signal amplitude to 2.1 ± 0.1Vp-p. Note: Make sure that the black side does not interfere in GAIN adjustment. Adjust the amplitude as for G and B in the same procedure. 
5	**Sample hold pulse phase checking**	1. Feed the XGA mode monochrome signal. 2. Select the following group, sub-group and subjects. Group : LCD2(6050) Sub-group: CLDLY Subject : R_CLDLY G_CLDLY B_CLDLY R_REVCLDLY G_REVCLDLY B_REVCLDLY	● Feed the G (30%) signal to see if there is no vertical stripe visible on the screen. If it is visible, adjust the setting to somewhere between 160 and 200. Make also sure that the R and B settings are as follows. R_CLDLY 171 R_REVCLDLY 175 B_CLDLY 175 B_REVCLDLY 178

No.	Adjusting point	Adjusting conditions	Adjusting procedure
6	**RGB countervoltage adjustment**	1. Feed the countervoltage adjustment signal. (XGA) 2. Select the following group, sub-group and subjects. Group : LCD2 (6050) Sub-group: COM Subject : R_LCCOM (In R adjustment) G_LCCOM (In G adjustment) B_LCCOM (In B adjustment) R_REVLCCOM (In R reverse adjustment) G_REVLCCOM (In G reverse adjustment) B_REVLCCOM (In B reverse adjustment)	● Using the set's control switch or the remote controller's button, adjust the setting so that the flickering be minimum. ● Adjust the setting so that the image comes to the center of the screen.
7	**RGB tone reproduction adjustment**	1. Feed the green-only SMPTE pattern signal. (XGA) 2. Select the following group, sub-group and subject. Group : Adjust PC Image Sub-group: CXA2111R Subject : AMP-BLK	● Adjust the AMP-BLK setting so that the gradation of the part ① (white 95% and 100%) as shown in the figure below is barely discernible. ● Make sure that the gradation of the part ② (black 0% and 5%) is also discernible. 
8	**RGB white balance adjustment**	1. Feed the 32-step grayscale signal. (XGA) 2. Select the following group, sub-group and subjects. Group : Adjust PC Image Sub-group: CXA2111R Subject : AMP-R-BLK (In R adjustment) AMP-B-BLK (In B adjustment)	● Adjust the setting to achieve the best color tone balance.
9	**Horizontal center adjustment**	1. Feed the NTSC monoscope signal. 2. Select the following group, sub-group and subject. Group : Adjust VIDEO Image Sub-group: VPC3230 Subject : H-Position	● Make sure the setting is 52.

No.	Adjusting point	Adjusting conditions	Adjusting procedure
10	**Video BRIGHT-NESS adjustment**	1. Feed the NTSC 10-step signal. 2. Select the following group, sub-group and subject. Group : Adjust VIDEO Image Sub-group: VPC3230 Subject : Bright	● Make sure the setting is as shown below. PG-C20XU 142 PG-C20XE 145
11	**Video CON-TRAST adjustment**	1. Feed the NTSC 10-step signal. 2. Select the following group, sub-group and subject. Group : Adjust VIDEO Image Sub-group: VPC3230 Subject : Contrast 3. Connect the synchroscope to TP1402.	● First reach a setting where the color tone level 10 gets saturated. Then decrease the setting by one point. 
12	**Color saturation adjustment**	1. Feed the color bar signal. 2. Select the following group, sub-group and subject. Group : Adjust VIDEO Image Sub-group: VPC3230 Subject : Color	● Make sure the setting is 128.
13	**PSIG adjustment**	1. Select the following group, sub-group and subjects. Group : Adjust VIDEO image Sub-group: CXA2111R Subject : PRGLEV SIDLEV 2. Connect the synchroscope to TP1210. 3. Using the NTSC 10-step input signal, make sure that there is no vertical stripes appearing every 12 dots. (If white or black vertical stripes appear, fine-adjust the SIDLEV setting.)	 ● Make sure the setting is as shown below. PRGLEV .... 61 SIDLEV 170

No.	Adjusting point	Adjusting conditions	Adjusting procedure
14	**VIDEO panel input signal amplitude adjustment**	1. Select the following group, sub-group and subjects. Group : Adjust VIDEO image Sub-group: CXA2111R Subject : AMP-R-Gain (In R adjustment) AMP-R-BLK (In R adjustment) AMP-G-Gain (In G adjustment) AMP-G-BLK (In G adjustment) AMP-B-Gain (IN B adjustment) AMP-B-BLK (IN B adjustment) 2. Connect the synchroscope to the following TPs. In R adjustment TP1101 In G adjustment TP1201 In B adjustment TP1301 3. Feed the NTSC 10-step signal.	1.Select AMP-R-Gain and adjust the signal amplitude to 3.8 ± 0.1Vp-p. 2.Select AMP-R-BLK and adjust the white-white signal amplitude to 2.1 ± 0.1Vp-p. 3.Select AMP-G-Gain and adjust the signal amplitude to 3.5 ± 0.1Vp-p. 4.Select AMP-G-BLK and adjust the white-white signal amplitude to 2.6 ± 0.1Vp-p. 5.Select AMP-B-Gain and adjust the signal amplitude to 3.5 ± 0.1Vp-p. 6.Select AMP-B-BLK and adjust the white-white signal amplitude to 2.6 ± 0.1Vp-p. Note: Make sure that the black side does not interfere in Gain adjustment. 
15	**Video white balance adjustment**	1. Feed the 32-step gray-scale signal. (VIDEO) 2. Select the following group, sub-group and subjects. Group : Adjust VIDEO Image Sub-group: CXA2111R Subject : AMP-R-BLK (In R adjustment) AMP-B-BLK (In B adjustment)	● Adjust the setting to achieve the best color tone balance.
16	**Automatic color irregularity correction**	1. Apply the automatic color correction using the automatic color irregularity correction system.	● Make sure that no remarkable uneven color remains on the screen.
17	**Color-related performance checking**	1. Feed the color bar signal.	● User adjustment: Check the Color and Tint settings.
18	**Video-related performance checking**	1. Feed the monoscope pattern signal.	● User adjustment: Check the performance relating to Contrast, Brightness and Sharpness.
19	**Audio-related performance checking**	1. Feed the audio signal.	● User adjustment: Check the sound volume performance.

No.	Adjusting point	Adjusting conditions	Adjusting procedure
20	**RGB-related performance checking**	1. Feed the RGB signal.	● User adjustment: Check the performance relating to Contrast, Brightness, Red, Blue, Clock, Phase, H-POS, and V-POS.
21	**DVD performance checking**	1. Receive the 480I signal.	● User adjustment: Check the performance relating to Contrast, Brightness, Color, Tint and Sharpness.
22	**Thermistor performance checking**	1. Heat the thermistor with a hair dryer.	● Make sure that the temperature is indicated.
23	**Auto sync performance checking**	1. Feed the phase check pattern signal.	● In the VGA, SVGA, XGA, and SXGA modes, make sure the Clock, Phase, H-Pos and V-Pos settings can be automatically adjusted.
24	**Keystone correction performance checking**		● Make sure that the keystone distortion can be corrected.
25	**Lamp power changeover performance checking**		● Make sure that the brightness can be changed with the user lamp power control.
26	**Delivery settings**		● Make the following settings.

Destination (Model)	Process adjustment	Remote control adjustment
US (XU)	S4	Factory setting at 4
Europe (XE)	S4	Factory setting at 4

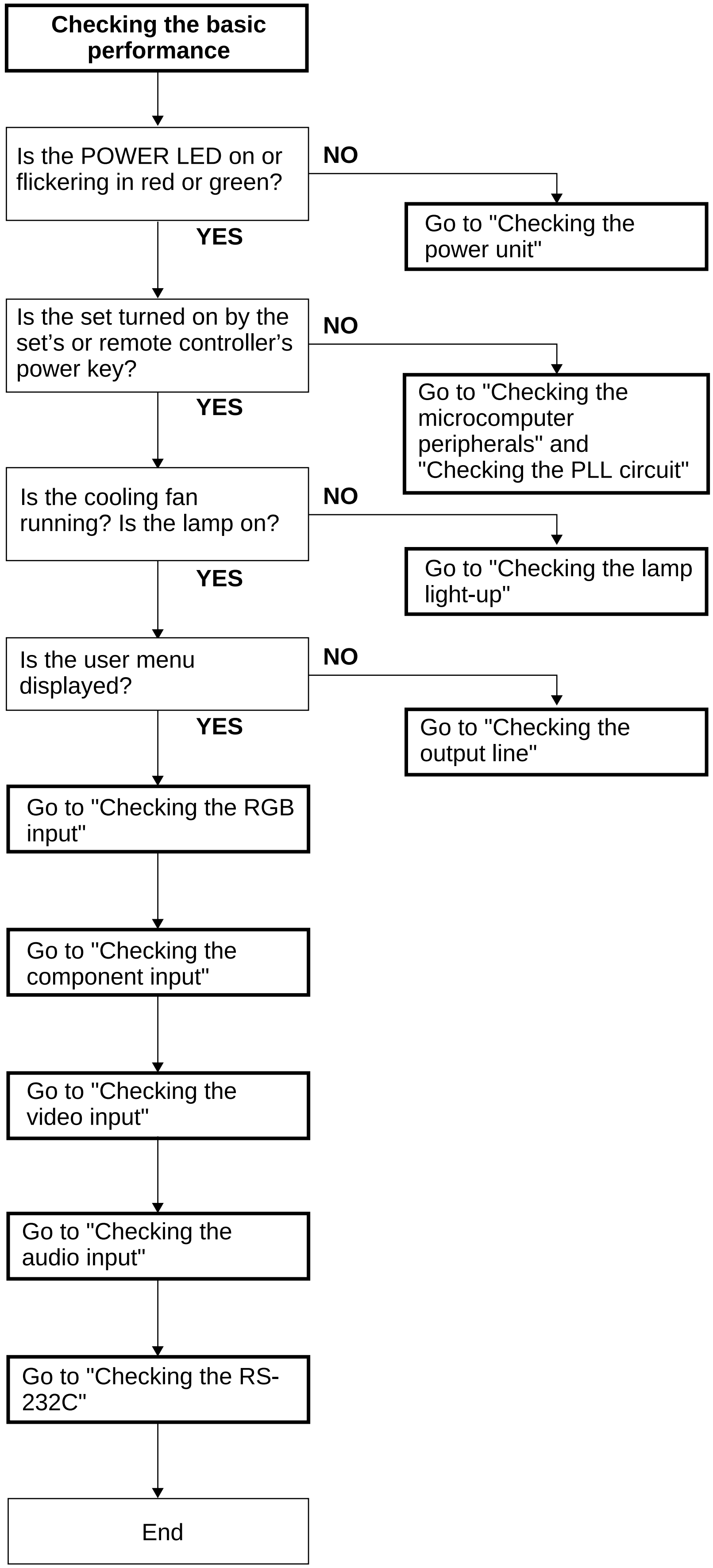
Process menu1

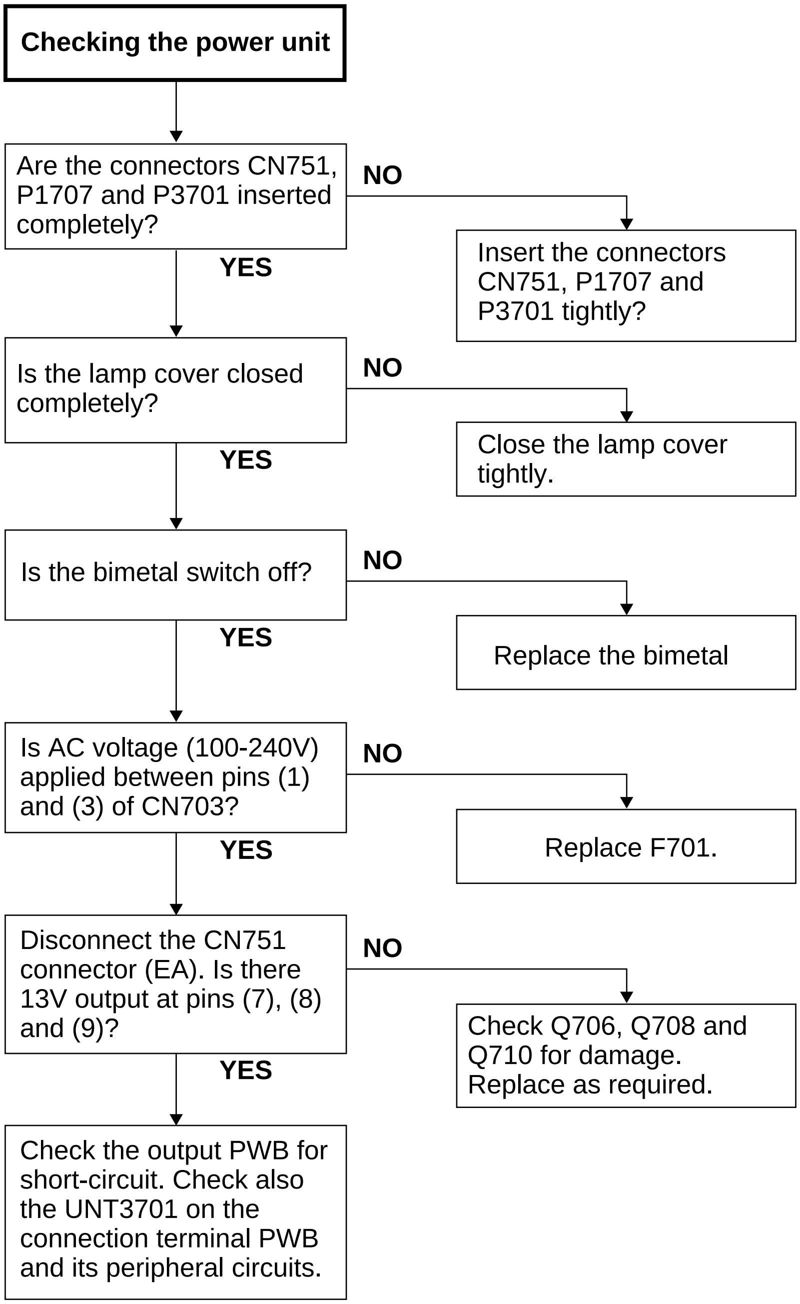
Group	Sub group	Subject
Adjust PC Image	AD	R-Bright
		R-Contrast
		G-Bright
		G-Contrast
		B-Bright
		B-Contrast
	CXA2111R	AMP-R-BLK
		AMP-R-GAIN
		AMP-G-BLK
		AMP-G-GAIN
		AMP-B-BLK
		AMP-B-GAIN
		AMP-BLK
		AMP-GAIN
Adjust VIDEO Image	VPC3230	Bright
		Contrast
		Color
		H-Position
		AGC
	CXA2111R	AMP-R-BLK
		AMP-R-Gain
		AMP-G-BLK
		AMP-G-Gain
		AMP-B-BLK
		AMP-B-Gain
		CLPLVL
		PRGLEV
		SIDLEV
Adjust Component (480I)	VPC3230	Bright
		Contrast
		Color
	CXA2111R	AMP-R-Gain
		AMP-G-Gain
		AMP-B-Gain
		AMP-R-BLK
		AMP-G-BLK
		AMP-B-BLK
LCD5(CXA1839)(480P) (The menu appears on the screen. But do not use this menu because this model is not equipped with the DTV function.)		DTV_Bright
		DTV_Contrast
		DTV_Color
		DTV_Tint
LCD2 (6050)	NRS	NRS-H
		NRS-L
	COM	R_LCCOM
		G_LCCOM
		B_LCCOM
		R_REVLCCOM
		G_REVLCCOM
		B_REVLCCOM

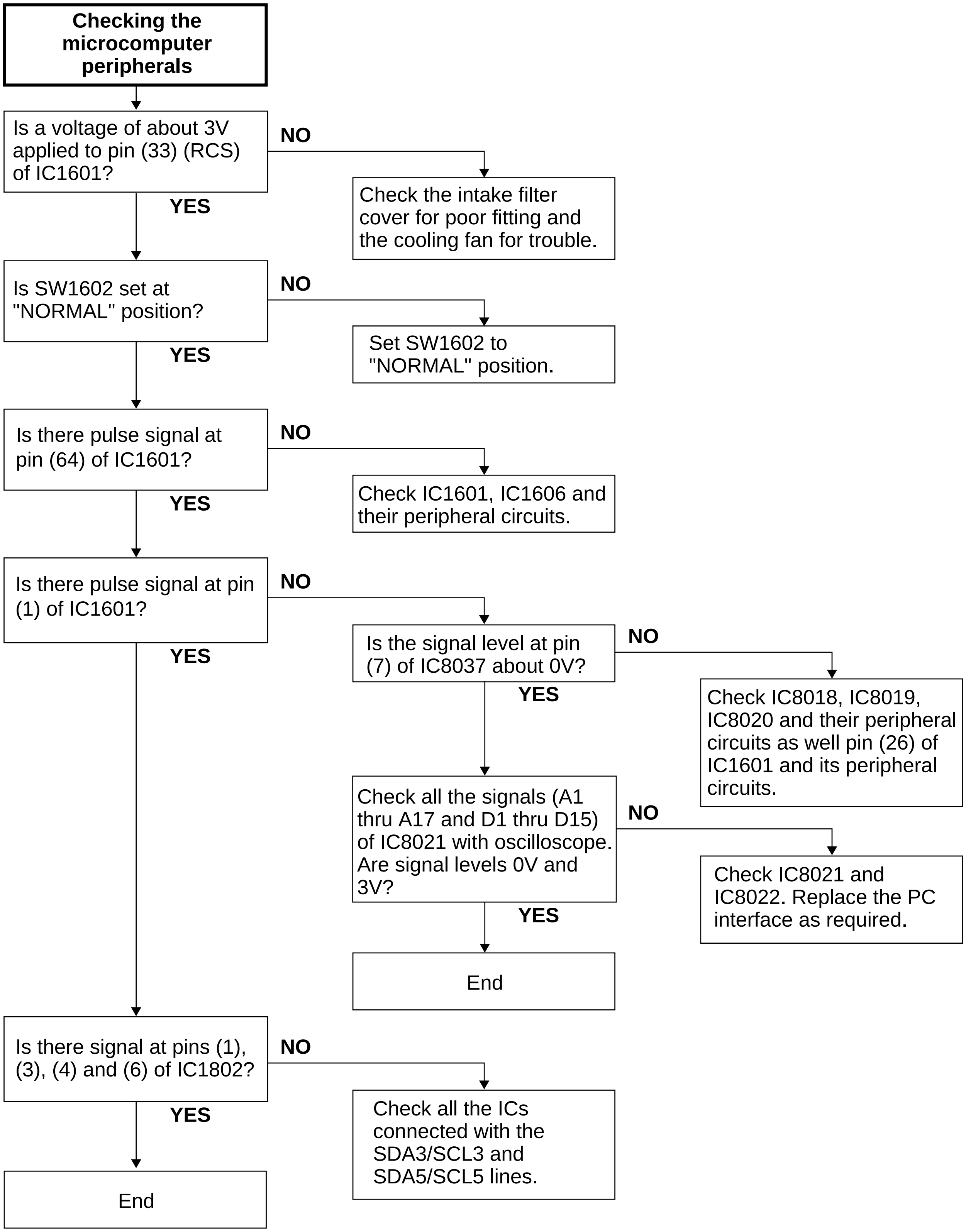
Process menu2

Group	Sub group	Subject
LCD2 (6050)	CLDLY	R_CLDLY
		G_CLDLY
		B_CLDLY
		R_REVCLDLY
		G_REVCLDLY
		B_REVCLDLY
LCD3 (Adjust GA4)	GHOST	R_GHOST
		G_GHOST
		B_GHOST
		R_GHOST_W
		G_GHOST_W
		B_GHOST_W
	CK-PHASE	RCK-PHASE
		GCK-PHASE
		BCK-PHASE
LCD4 (Adjust Conv)	Adjust Horz. Conv	R_HCONV
		G_HCONV
		B_HCONV
		R_REVHCONV
		G_REVHCONV
		B_REVHCONV
	Adjust Vert. Conv	R_VCONV
		G_VCONV
		B_VCONV
		R_REVVCONV
		G_REVVCONV
		B_REVVCONV
Version		Boot Code
		Config
		Sharp Table
		Rom Code
		GUI
		Sub CPU
SS		S4
		S5
Temp/Fan State	Temp	Inside Temp/ref
		Outside Temp/ref
	Fan Speed	Lamp Fan
		Other Fan
Option	Gamma Off	on/off
	Revise Color Uneven	on/off
	EEPROM Initialize	Cancel
		Initialize Start

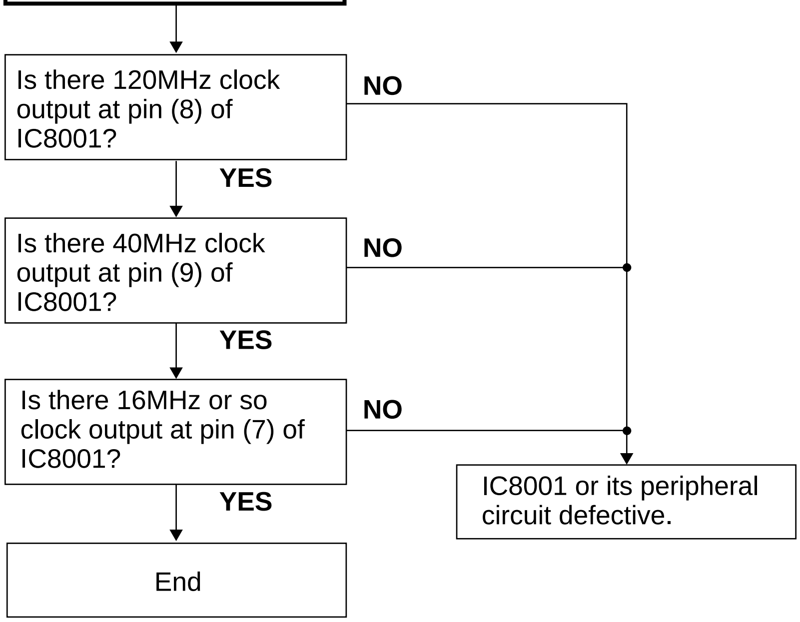
TROUBLE SHOOTING TABLE



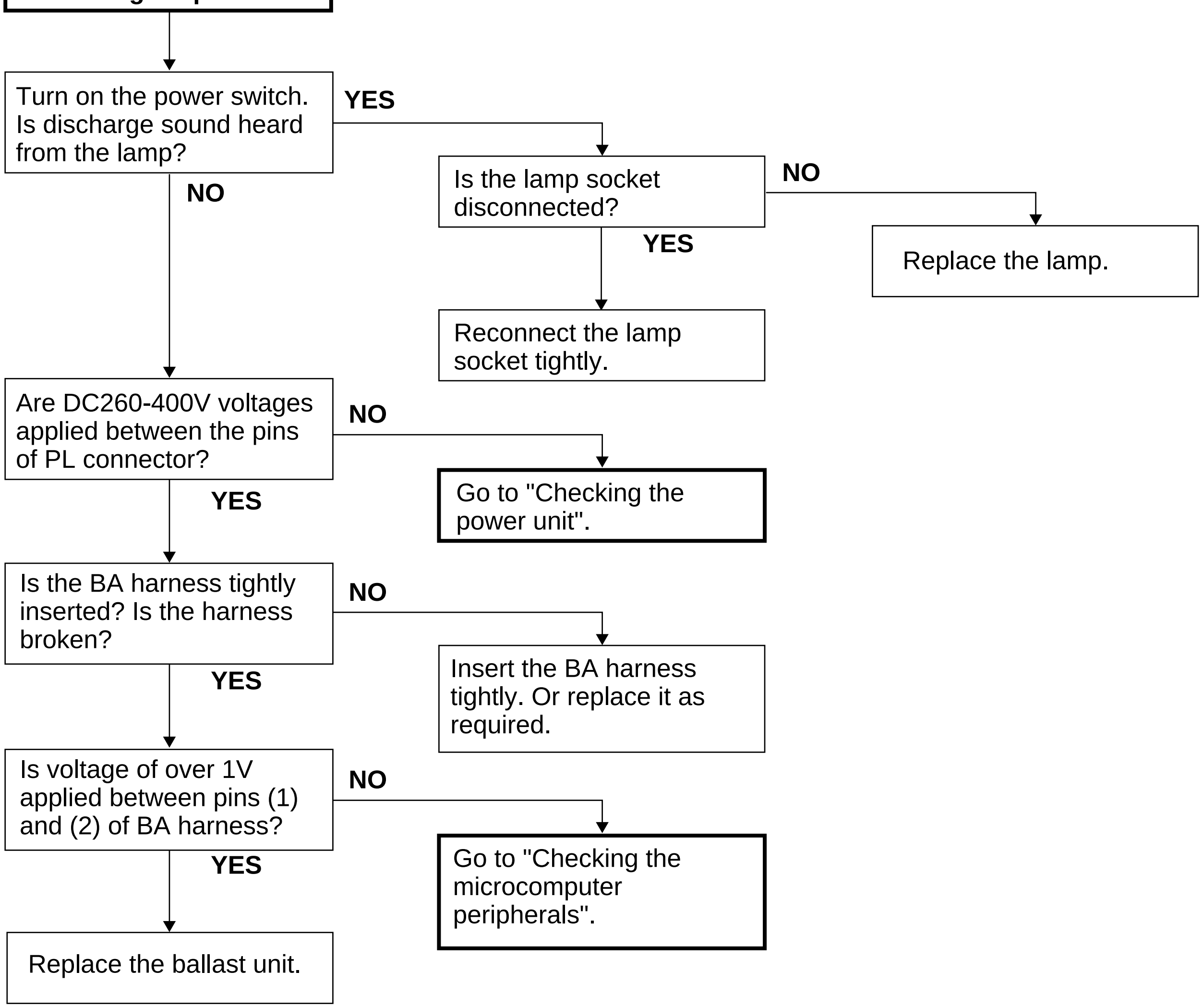

Checking the power unit
Are the connectors CN751, P1707 and P3701 inserted completely?
NO
Insert the connectors CN751, P1707 and P3701 tightly?
YES
Is the lamp cover closed completely?
NO
Close the lamp cover tightly.
YES
Is the bimetal switch off?
NO
Replace the bimetal
YES
Is AC voltage (100-240V) applied between pins (1) and (3) of CN703?
NO
Replace F701.
YES
Disconnect the CN751 connector (EA). Is there 13V output at pins (7), (8) and (9)?
NO
Check Q706, Q708 and Q710 for damage. Replace as required.
YES
Check the output PWB for short-circuit. Check also the UNT3701 on the connection terminal PWB and its peripheral circuits.


Checking the microcomputer peripherals
Is a voltage of about 3V applied to pin (33) (RCS) of IC1601?
NO
Check the intake filter cover for poor fitting and the cooling fan for trouble.
YES
Is SW1602 set at "NORMAL" position?
NO
Set SW1602 to "NORMAL" position.
YES
Is there pulse signal at pin (64) of IC1601?
NO
Check IC1601, IC1606 and their peripheral circuits.
YES
Is there pulse signal at pin (1) of IC1601?
NO
Is the signal level at pin (7) of IC8037 about 0V?
NO
Check IC8018, IC8019, IC8020 and their peripheral circuits as well pin (26) of IC1601 and its peripheral circuits.
YES
Check all the signals (A1 thru A17 and D1 thru D15) of IC8021 with oscilloscope. Are signal levels 0V and 3V?
NO
Check IC8021 and IC8022. Replace the PC interface as required.
YES
End
YES
Is there signal at pins (1), (3), (4) and (6) of IC1802?
NO
Check all the ICs connected with the SDA3/SCL3 and SDA5/SCL5 lines.
YES
End

Checking the PLL circuit

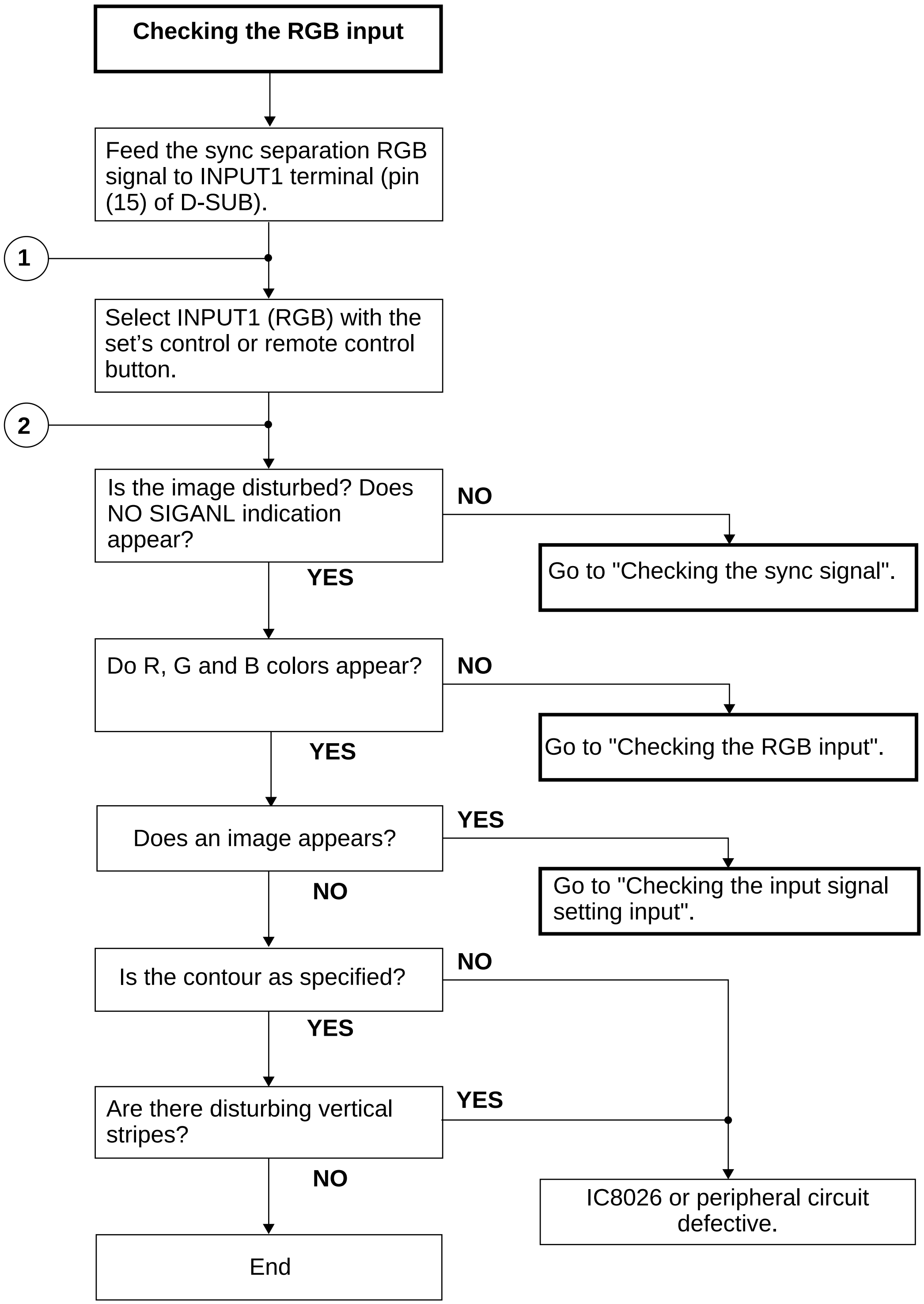


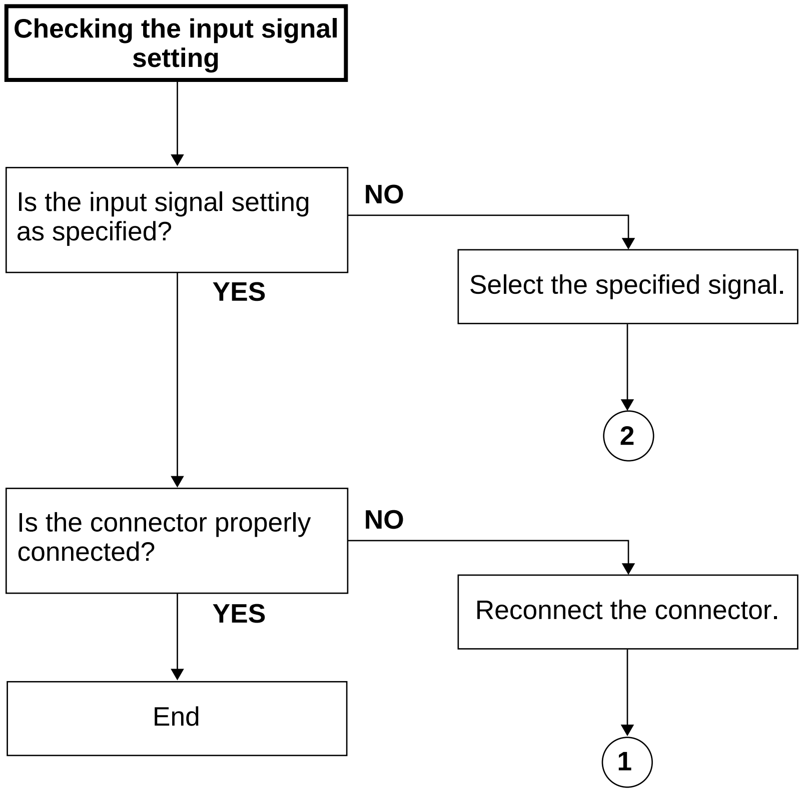
Checking the lamp light-up

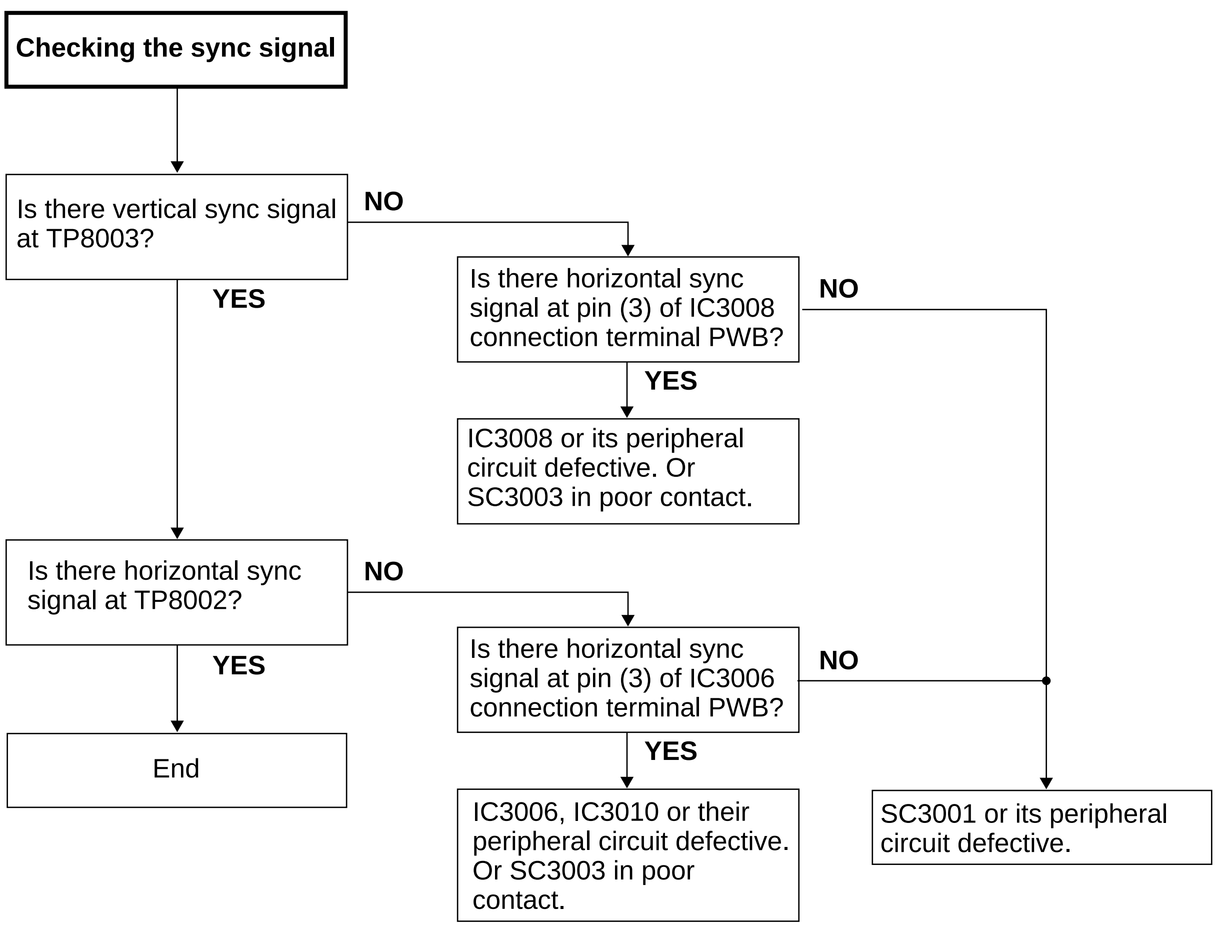


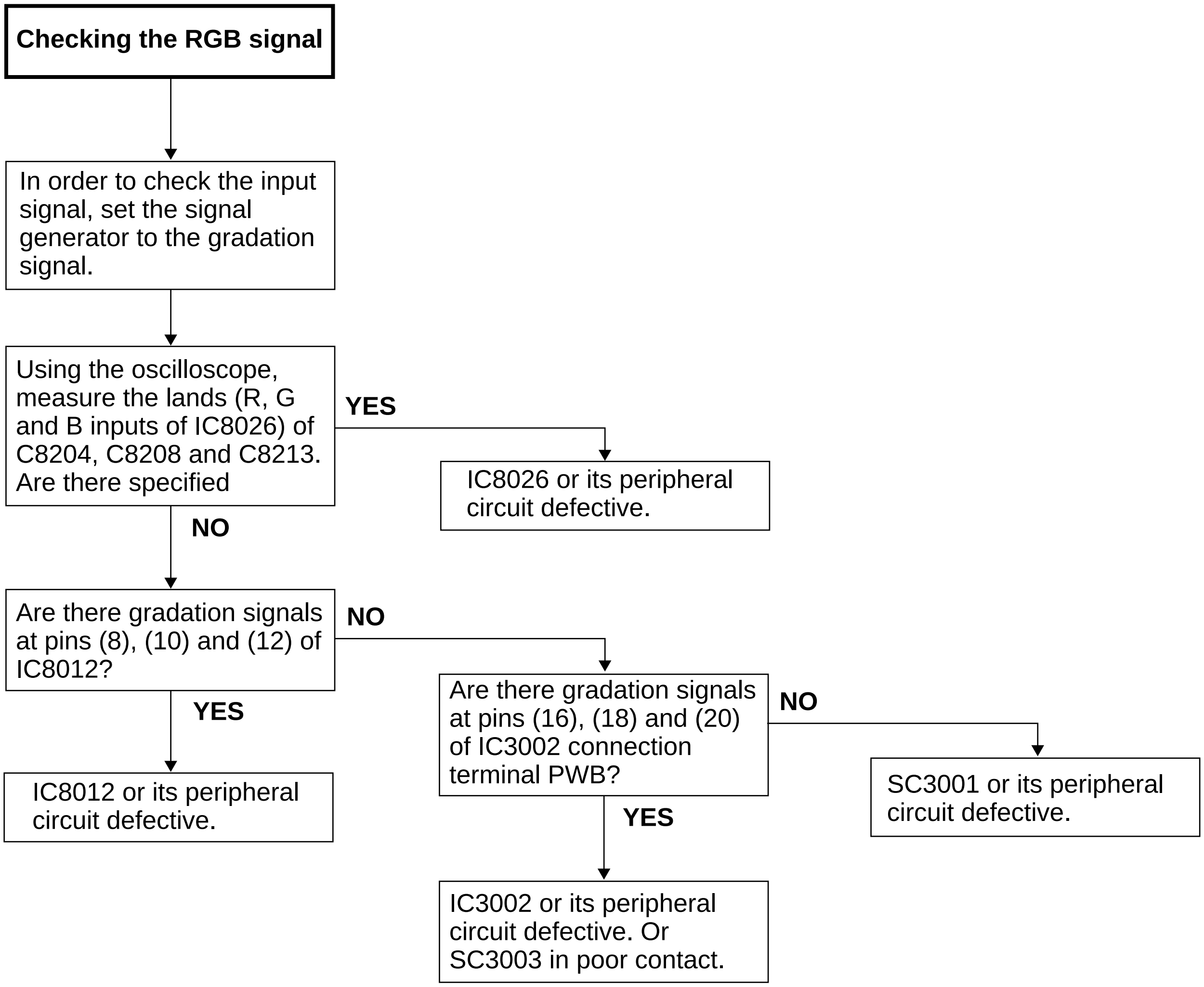
Checking the output line

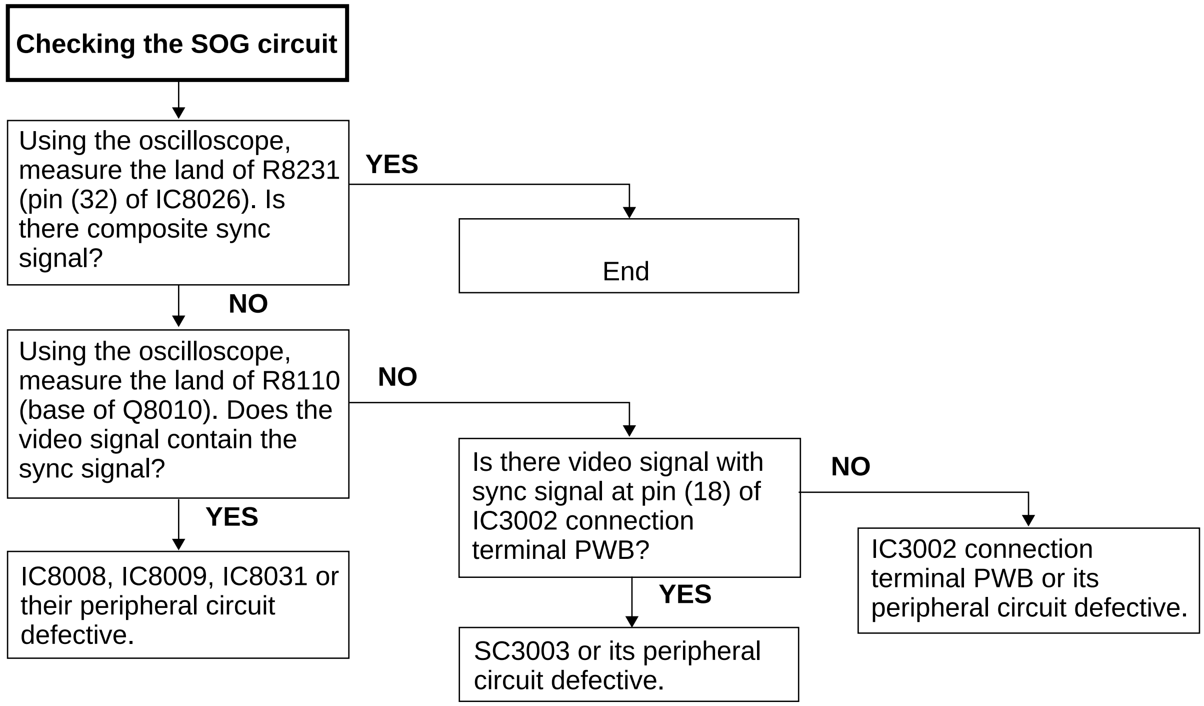
- Are there video input signals at TP1401, TP1402 and TP1403?
  - NO → Check P8001 and SC1701 for solder cracks.
    - Are there video output signals at pins (42), (44) and (46) of IC8024?
      - YES → Check Q8013, Q8014, Q8015 and their peripheral circuits.
      - NO → Are there digital input signals at pins (1) thru (33) of IC8024?
        - YES → Check IC8024 and IC8025.
        - NO → IC8023 defective. Replace the PC interface.
  - YES ↓
- Are there video output signals at pins (14), (16) and (18) of IC1405?
  - NO → Check IC1405, IC1403 and their peripheral circuits.
  - YES ↓
- Are there video input signals at pins (45) of IC1101, IC1201, IC1301, IC1102, IC1202 and IC1302?
  - NO → Check IC1102, IC1202, IC1302 and their peripheral circuits as well as pins (35) and (36) and the 15.5V power line.
  - YES ↓
- Are there clock input signals (MCLK) at pins (54) and (55) of IC1102, IC1202 and IC1302?
  - NO → **Check P8001 and SC1701 for solder cracks, and go to "Checking the digital signal processing circuit".** → IC8023 defective. Replace the PC interface.
  - YES ↓
- Are there output signals at pins (17), (19), (21), (28), (30) and (32) of IC1101, IC1201, IC1301, IC1102, IC1202 and IC1302?
  - NO → Check IC1101, IC1201, IC1301, IC1102, IC1202, IC1302, IC1401, IC1403, IC1405 and their peripheral circuits.
  - YES ↓
- Are signals going to the control signal lines at pins (3) thru (21) of IC1103, IC1203 and IC1303?
  - NO → **Check P8001 and SC1701 for solder cracks, and go to "Checking the digital signal processing circuit".** → IC8023 defective. Replace the PC interface.
  - YES ↓
- Are signals coming from the control signal lines at pins (11) thru (17) of IC1402 and IC1404?
  - NO → Check IC1402, IC1404 and their peripheral circuits.
  - YES ↓
- Are there input signals at SC1101, SC1201 and SC1301?
  - NO → Check SC1101, SC1202, SC1301 and their peripheral circuits.
  - YES ↓
- Check the R, G and B panels.

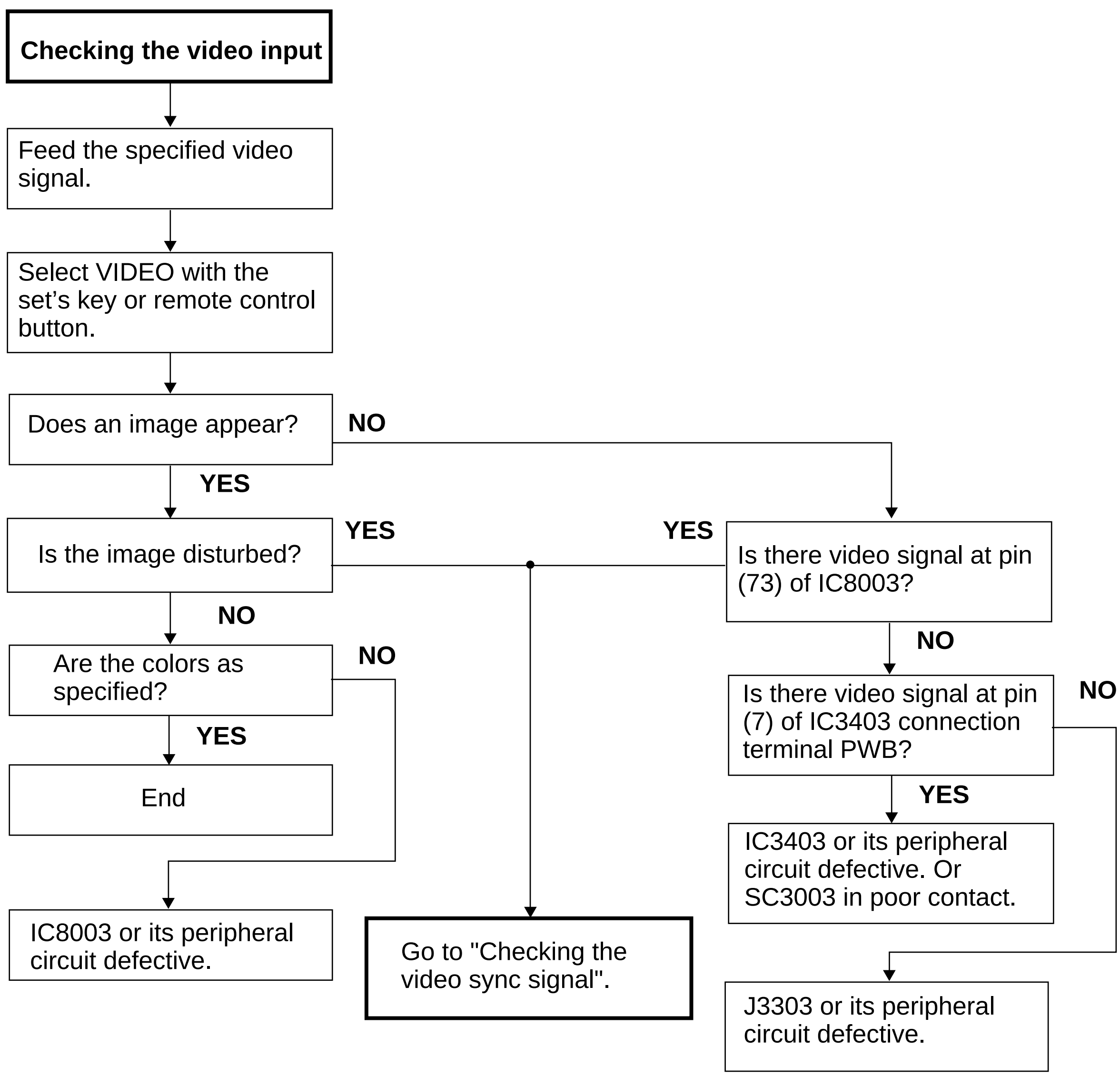

Checking the RGB input
Feed the sync separation RGB signal to INPUT1 terminal (pin (15) of D-SUB).
1
Select INPUT1 (RGB) with the set's control or remote control button.
2
Is the image disturbed? Does NO SIGANL indication appear?
NO
Go to "Checking the sync signal".
YES
Do R, G and B colors appear?
NO
Go to "Checking the RGB input".
YES
Does an image appears?
YES
Go to "Checking the input signal setting input".
NO
Is the contour as specified?
NO
YES
Are there disturbing vertical stripes?
YES
IC8026 or peripheral circuit defective.
NO
End

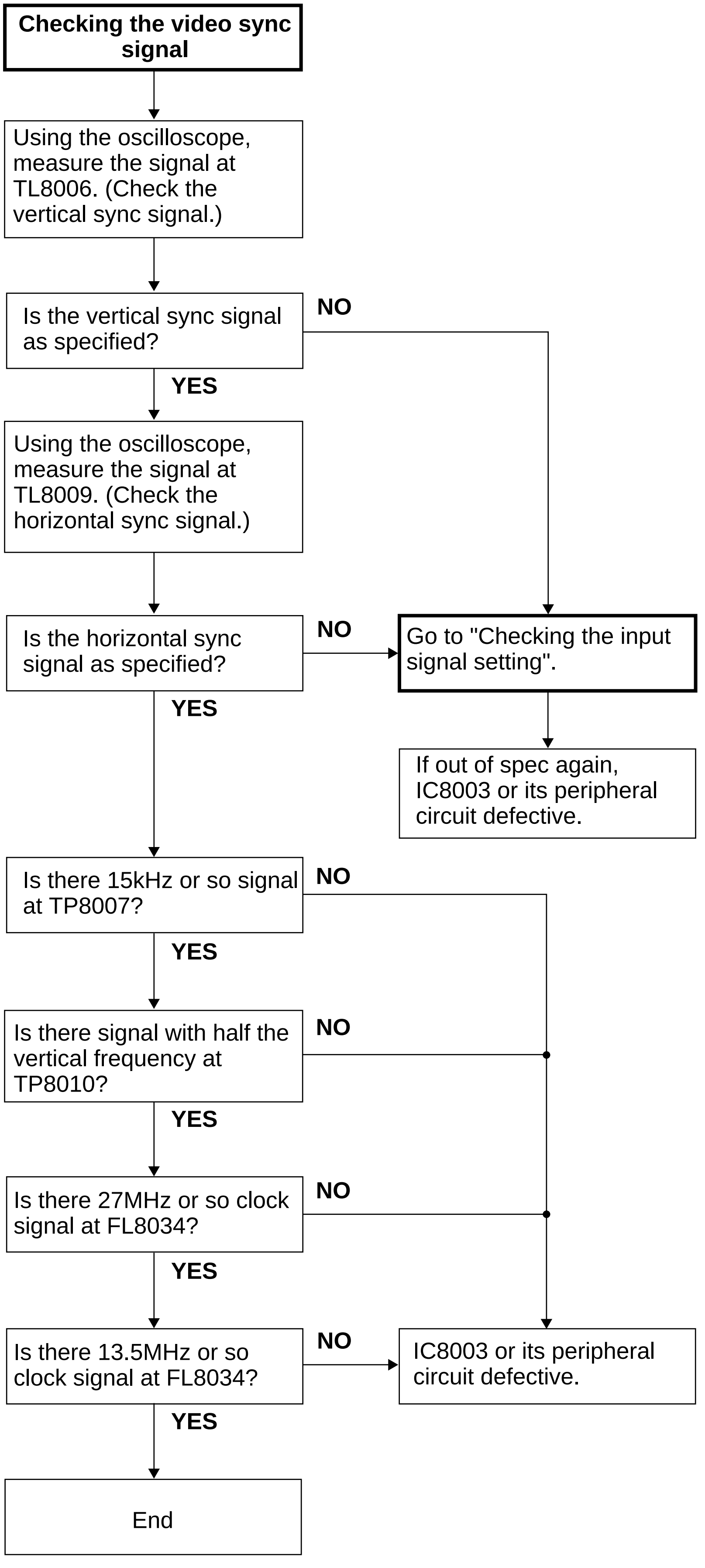

Checking the input signal setting
Is the input signal setting as specified?
NO
Select the specified signal.
2
YES
Is the connector properly connected?
NO
Reconnect the connector.
1
YES
End

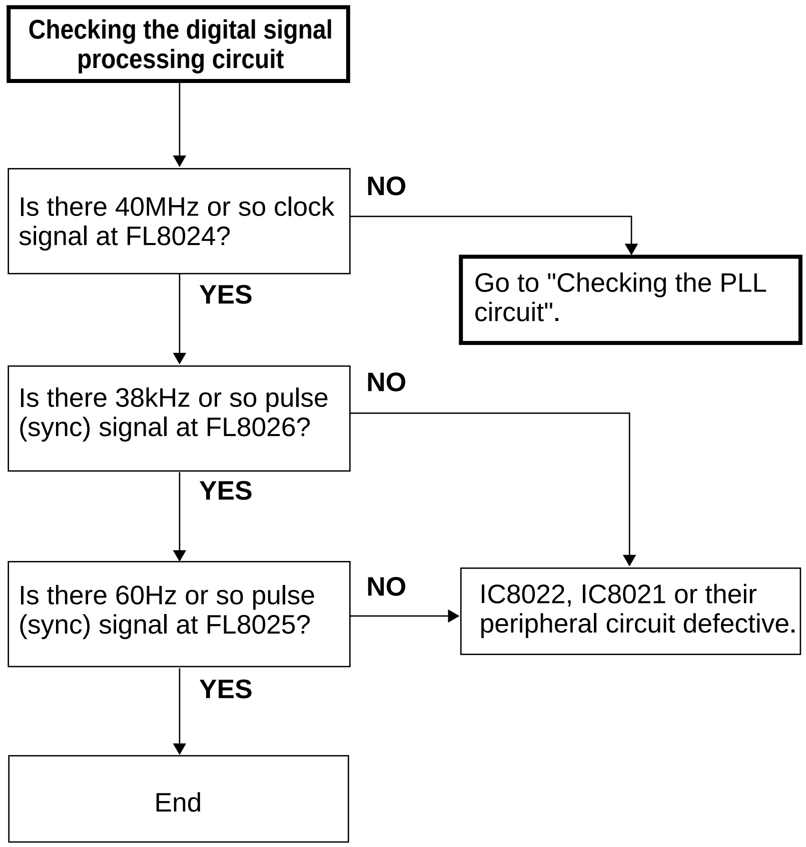

Checking the sync signal
Is there vertical sync signal at TP8003?
NO
Is there horizontal sync signal at pin (3) of IC3008 connection terminal PWB?
NO
YES
IC3008 or its peripheral circuit defective. Or SC3003 in poor contact.
YES
Is there horizontal sync signal at TP8002?
NO
Is there horizontal sync signal at pin (3) of IC3006 connection terminal PWB?
NO
YES
IC3006, IC3010 or their peripheral circuit defective. Or SC3003 in poor contact.
SC3001 or its peripheral circuit defective.
YES
End


Checking the RGB signal
In order to check the input signal, set the signal generator to the gradation signal.
Using the oscilloscope, measure the lands (R, G and B inputs of IC8026) of C8204, C8208 and C8213. Are there specified
YES
IC8026 or its peripheral circuit defective.
NO
Are there gradation signals at pins (8), (10) and (12) of IC8012?
NO
YES
IC8012 or its peripheral circuit defective.
Are there gradation signals at pins (16), (18) and (20) of IC3002 connection terminal PWB?
NO
SC3001 or its peripheral circuit defective.
YES
IC3002 or its peripheral circuit defective. Or SC3003 in poor contact.


Checking the SOG circuit
Using the oscilloscope, measure the land of R8231 (pin (32) of IC8026). Is there composite sync signal?
YES
End
NO
Using the oscilloscope, measure the land of R8110 (base of Q8010). Does the video signal contain the sync signal?
NO
Is there video signal with sync signal at pin (18) of IC3002 connection terminal PWB?
NO
IC3002 connection terminal PWB or its peripheral circuit defective.
YES
SC3003 or its peripheral circuit defective.
YES
IC8008, IC8009, IC8031 or their peripheral circuit defective.


Checking the video input
Feed the specified video signal.
Select VIDEO with the set's key or remote control button.
Does an image appear?
NO
YES
Is the image disturbed?
YES
YES
Is there video signal at pin (73) of IC8003?
NO
Is there video signal at pin (7) of IC3403 connection terminal PWB?
YES
IC3403 or its peripheral circuit defective. Or SC3003 in poor contact.
NO
J3303 or its peripheral circuit defective.
NO
Are the colors as specified?
YES
End
NO
IC8003 or its peripheral circuit defective.
Go to "Checking the video sync signal".


Checking the video sync signal
Using the oscilloscope, measure the signal at TL8006. (Check the vertical sync signal.)
Is the vertical sync signal as specified?
NO
YES
Using the oscilloscope, measure the signal at TL8009. (Check the horizontal sync signal.)
Is the horizontal sync signal as specified?
NO
Go to "Checking the input signal setting".
YES
If out of spec again, IC8003 or its peripheral circuit defective.
Is there 15kHz or so signal at TP8007?
NO
YES
Is there signal with half the vertical frequency at TP8010?
NO
YES
Is there 27MHz or so clock signal at FL8034?
NO
YES
Is there 13.5MHz or so clock signal at FL8034?
NO
IC8003 or its peripheral circuit defective.
YES
End


Checking the digital signal processing circuit
Is there 40MHz or so clock signal at FL8024?
NO
Go to "Checking the PLL circuit".
YES
Is there 38kHz or so pulse (sync) signal at FL8026?
NO
YES
Is there 60Hz or so pulse (sync) signal at FL8025?
NO
IC8022, IC8021 or their peripheral circuit defective.
YES
End

Checking the audio signal

1. Are there audio output signals at pins (7) of IC3301 and IC3302?
   - NO → Check the audio cable. Switch IC3301 and IC3302 to each other to check the peripheral circuits.
   - YES ↓
2. Is voltage applied to pin (4) of IC1901?
   - NO → Check R1914 first and then the power circuit.
   - YES ↓
3. Using the remote control, change VOL and cancel MUTE. Does the voltage at pin (7) of IC1901 vary accordingly?
   - NO → Check IC1403, IC1605 and their peripheral circuits.
   - YES ↓
4. Is there audio output signal at pin (5) of IC1901?
   - NO → Check IC1901 and its peripheral circuits.
   - YES ↓
5. Check the SP connector.

Checking the RS-232C

1. Using the communication software ("TERA TERM" recommended), make the following settings:
   Baud rate: 9600 bps
   Bit length: 8 bits
   Stop bit: 1 bit
   Parity: None
   Press the RETURN key on the keyboard. Does "ERR" reappear?
   - NO → Check IC3601, IC1606, IC1601, SW1602, IC8022, communication circuit and their peripheral circuits.
   - YES ↓
2. End

Technische Daten

Produkttyp	LCD Projector
Modell	PG-C20XU/XE
Videosystem	PAL/PAL 60/PAL-M/PAL-N/SECAM/NTSC 3.58/NTSC 4.43/DTV 480P
Wiedergabeverfahren	LCD-Projektionspaneel x 3,optisches RGB-Verschlußverfahren
LCD-Projektionspaneel	Panelgröße:22,9 mm (0,9") (13,9 mm [H] x 18,5 mm [B])
	Wiedergabe-Verfahren:Durchl ä ssiges TN-Flüssigkristall-Paneel
	Treiberverfahren:TFT (Dünnfilmtransistor) Aktivmatrix-Paneel
	Anzahl der Bildpunkte:786.432 Bildpunkte (1.024 [H] x 768 [V])
Objektiv	1 –1,2 Zoomobjektiv, F2,3 –2,6, f =36,0 –43,2 mm
Projektionslampe	150 W Gleichstrom-Lampe
Kontrastverh ä ltnis	500:1
Videoeingangssignal	RCA-Stecker:VIDEO, Gemischtes Video, 1,0 Vs-s, negatives Sync.-Signal, 75 Ω terminiert
	RCA-Stecker:AUDIO, 0,5 Vrms mehr als 22 kΩ (Stereo)
S-Videoeingangssignal	4-Pin Mini DIN-Stecker
	Y (Luminanz-Signal):1,0 Vs-s,negatives Sync.-Signal, 75 Ω terminiert
	C (Chrominanz-Signal):Stoß 0,286 Vs-s, 75 Ω terminiert
Horizontale Aufl ö sung	580 Fernsehzeilen (Videoeingang)
Audioausgang	1,0 W (monaural)
RGB-Computereingangssignal	15-Pin Mini D-Sub Steckanschluss (Computer-Eingangsport 1 (COMPUTER INPUT 1), Computer-Ausgangsport für Eingangs-Port 1 (COMPUTER OUTPUT für INPUT 1): RGB getrennt/gemischte Sync./Sync.auf Grün-Typ analoger Eingang:0 –0,7 Vs-s, positiv,75 Ω terminiert
	Stereo-Minibuchse:AUDIO,0,5 Vrms,mehr als 22 kΩ (Stereo)
	Horizontales Sync.-Signal:TTL-Pegelsignal (positiv/negativ)oder gemischtes Sync.-Signal (nur Macintosh)
	Vertikales Sync.-Signal:Wie oben
Punktetakt	12 –108 MHz
Vertikale Frequenz	43 –85 Hz
Horizontale Frequenz	15 –80 kHz
Computereingangs-Signal	9-Pin Mini DIN-Steckanschluß (RS-232C-Anschlußstelle)
Lautsprechersystem	2,8 cm (1 $^{7}/_{64}$") rund
Nennspannung	100 –240 V Wechselstromspannung
Eingangsspannung	2,6 A
Nennfrequenz	50/60 Hz
Nennaufnahme	230 W (Wahl von "OFF" im "Energiespar-Modus".)
	200 W (Wahl von "ON" im "Energiespar-Modus".)
Betriebstemperatur	+5°C bis +35°C
Lagertemperatur	–20°C bis +60°C
Geh ä use	Kunststoff
I/R-Tr ä gerfrequenz	38 kHz
Abmessungen (ca.)	260 x 74 x 207 mm (B x H x T) (nur Hauptgerät)
	260 x 82 x 207 mm (B x H x T) (einschlie ß lich Drehfüße und vorstehende Teile)
Gewicht (ca.)	2,6 kg
Mitgeliefertes Zubehör	Fernbedienung, Zwei Batterien der Größe AAA,Netzkabel (3,6 m), RGB-Computerkabel (3 m), Computer-Audiokabel (3 m), PS/2-Maus-Steuerungskabel (1 m), USB-Maus-Steuerungskabel (1,5 m), DIN-D-Sub RS-232C-Kabel (15 cm), Fernbedienungs-Mausempfänger, Ersatz-Luftfilter, Objektivkappe (angebracht), Objektivkappenband, CD-ROM, Bedienungsanleitung für LCD-Projektor, Kurzanleitungen für den LCD-Projektor
Ersatzteile	Lampensatz (Lampe/Käfigmodul)(BQC-PGC20X//1), Fernbedienung (RRMCG1613CESA), Batterien der Größe AAA,Netzkabel (CACCU5013DE01 (PG-C20XU), QACCV4002CEZZ (PG-C20XE), QACCB5024CENA (PG-C20XE)), RGB-Computerkabel (QCNWG0002EZZ), Computer-Audiokabel (QCNW-4870CEZZ), PS/2-Maus- Steuerungskabel (QCNW-5113CEZZ), USB-Maus-Steuerungskabel (QCNW-5680CEZZ), DIN-D-Sub RS-232C-Kabel (QCNW-5288CEZZ), Fernbedienungs-Mausempfänger (RUNTK0694CEZZ), Luftfilter (PFILD0123CEZZ), Objektivkappe (PCOVZ1095CEKA), Objektivkappenband (UBNDT0013CEZZ), CD-ROM (UDSKA0029CEN1 (PG-C20XU), UDSKA0048CEN1 (PG-C20XE)), Bedienungsanleitung für LCD-Projektor (TINS-7204CEZZ (PG-C20XU), TINS-7271CEZZ (PG-C20XE)), Kurzanleitungen für den LCD-Projektor (TINS-7205CEZZ (PG-C20XU), TINS-7272CEZZ (PG-C20XE), TINS-7284CEZZ (PG-C20XE), TINS-7285CEZZ (PG-C20XE))

Dieser Projektor von SHARP ist mit 3 LCD-(Flüssigkristallanzeige) Projektionspaneels ausgestattet. Diese neuartigen Projektionspaneels enthalten TFTs (Dünnfilmtransistoren) mit insgesamt 786.432 Bildpunkten (x RGB). Bei allen technologisch fortschrittlichen, elektronischen Geräten, z.B.Großbild-Fernsehern, Videosystemen bzw. Videokameras,sind bestimmte Toleranzgrenzen für die Funktionen gegeben.

Dieses Gerät hat einige inaktive,innerhalb akzeptierter Toleranzgrenzen liegende TFTs, die als beleuchtete oder als nicht aktive Punkte auf der Bildwand wiedergegeben werden. Dies hat keinen Einfluß auf die Bildqualität und die Lebensdauer des Gerätes.

Ä nderungen der technischen Daten ohne vorherige Ank ü ndigung vorbehalten.

HINWEIS FÜR DAS WARTUNGSPERSONAL

ACHTUNG: UV-STRAHLUNG

Die Beleuchtungsquelle des LCD-Projektors, eine UHP-Lampe, emittiert eine geringe Menge UV-Strahlung.

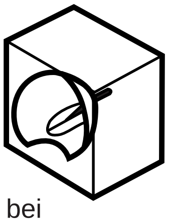
DIREKTE BESTRAHLUNG AUF AUGEN UND HAUT MUSS VERMIEDEN WERDEN.

Zur Gewährleistung der Sicherheit muß folgendes beachtet werden:

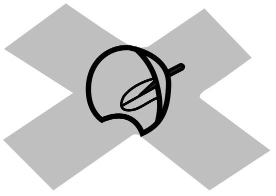
1. Bei Arbeiten am Projektor bei eingeschalteter Lampe und abgenommenem oberen Gehäuse muß unbedingt eine Sonnenbrille getragen werden.



2. Die Lampe darf nicht außerhalb des Lampengehäuses eingeschaltet werden.



3. Betrieb für länger als 2 Stunden bei abgenommenem Gehäuse ist nicht zulässig.



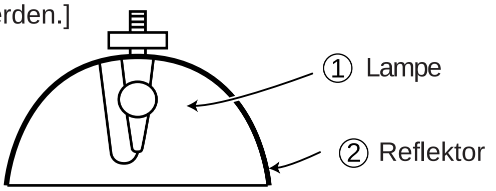
Zur Beachtung bei UV-Strahlung und Mitteldruck-Lampen

1. Vor dem Auswechseln der Lampe muß der Netzstecker gezogen werden.
2. Vor Durchführung von Wartungsarbeiten muß das Gerät eine Stunde abkühlen.
3. Die Lampe darf nur gegen eine der gleichen Art ausgewechselt werden. Typ BQC-PGC20X//1, bemessen für 100 V/200 W.
4. Die Lampe gibt eine geringe UV-Strahlung ab, daher muß direkter Augenkontakt vermieden werden.
5. Die Mitteldruck-Lampe weist ein Explosionsrisiko auf. Daher müssen die nachstehenden Installationsanweisungen beachtet werden, und die Lampe muß vorsichtig behandelt werden.

■ Auswechseln der Lampe

Hinweis:

Da die Lampe während des Betriebs sehr heiß wird, sollte die Lampe erst ausgewechselt werden, nachdem das Gerät mindestens eine Stunde ausgeschaltet war, damit die Lampe ausreichend abkühlen kann.
Beim Installieren der neuen Lampe muß darauf geachtet werden, die Lampe selbst (Glaskolben) nicht zu berühren. Vielmehr muß die Lampe am Reflektor ② gehalten werden.
[Es darf nur ein Original-Ersatzteil verwendet werden.]



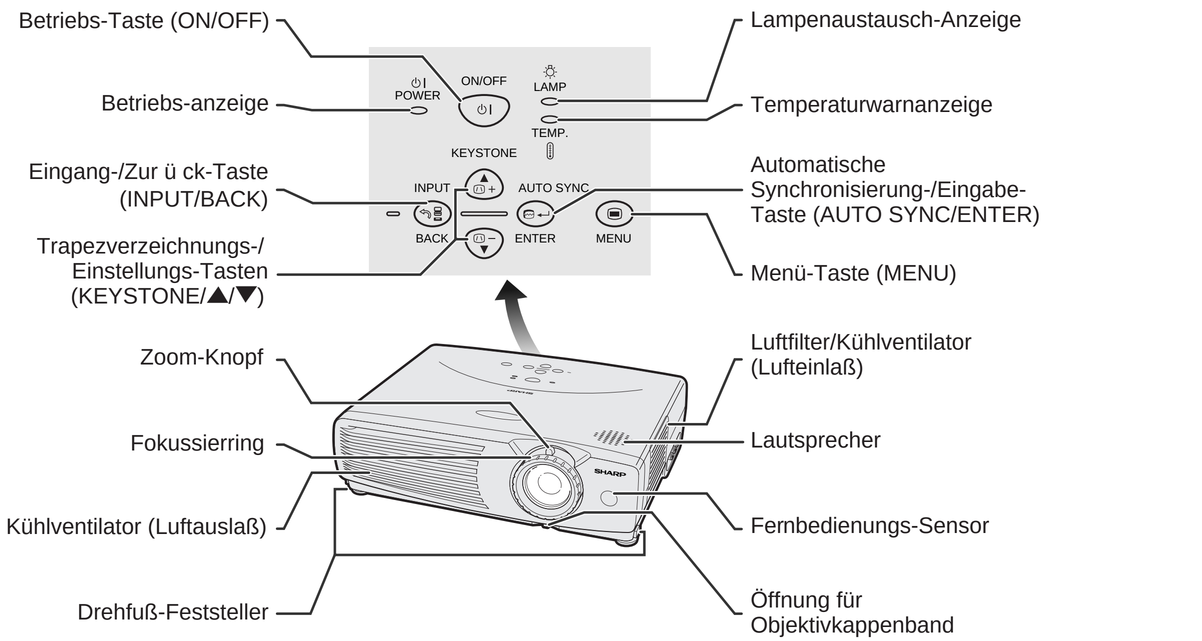
GEFAHR! — Niemals die Spannungsversorgung einschalten, ohne daß eine Lampe vorhanden ist, um elektrische Schläge und Schäden am Gerät zu vermeiden, da der Stabilisator anfangs hohe Spannungen erzeugt.

Da eine geringe Menge UV-Strahlung an der Öffnung zwischen den Lüftern austritt, wird empfohlen, während der Wartungsarbeiten die Abdeckkappe des Zusatzobjektivs an dieser Öffnung anzubringen, um Augen und Haut vor den UV-Strahlen zu schützen.

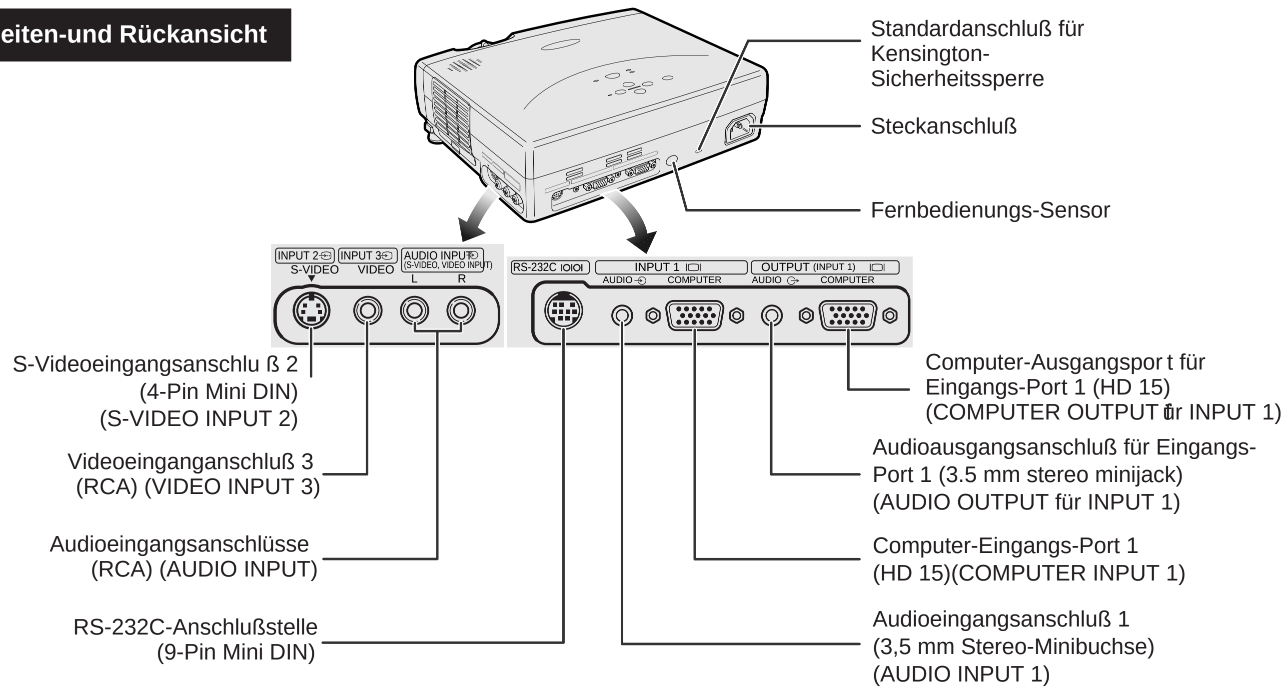
Lage der Bedienelemente

Projektor

Ansicht von vorne und oben

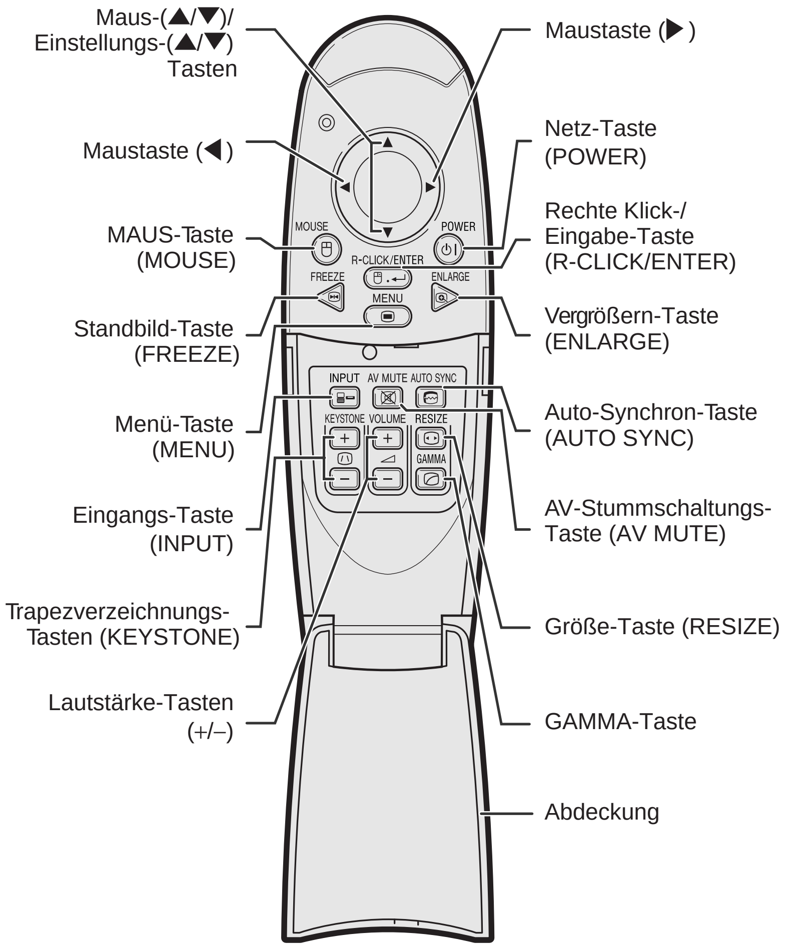


Seiten-und Rückansicht

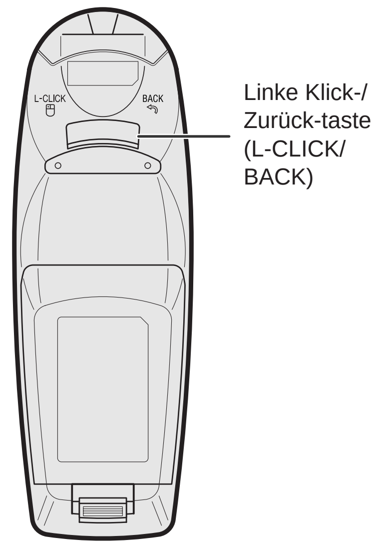


Fernbedienung

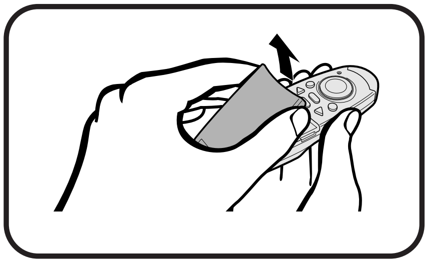
Vorderansicht



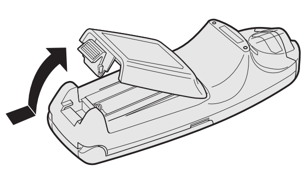
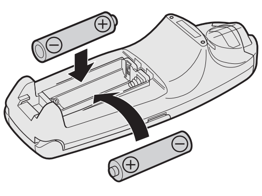
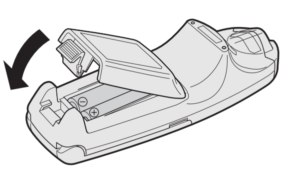
Ansicht von hinten



Öffnen der Abdeckung



Einsetzen der Batterien

1	2	3
Auf den Vorsprung drücken und die Batteriefachabdeckung in Pfeilrichtung öffnen.	**Zwei Batterien der Größe AAA einlegen und sicherstellen, daß die Pole mit der + und – Markierung im Batteriefach übereinstimmen.**	**Die Vorsprünge auf dem Ende der Batteriefachabdeckung in die Schlitze schieben und die Abdeckung auf das Batteriefach drücken.**
		

HINWEIS

- Wenn die Fernbedienung naß wird, sollte sie sofort trocken gewischt werden.
- Die Fernbedienung sollte nicht übermäßiger Wärme oder Feuchtigkeit ausgesetzt werden.
- Wenn die Fernbedienung für längere Zeit nicht verwendet wird, sollten die Batterie entfernt werden.
- Niemals neue und alte Batterien oder verschiedene Batterietypen mischen.
- Einige Bedienvorgänge können nur mit der Fernbedienung ausgeführt werden. Die Fernbedienung sorgfältig behandeln.

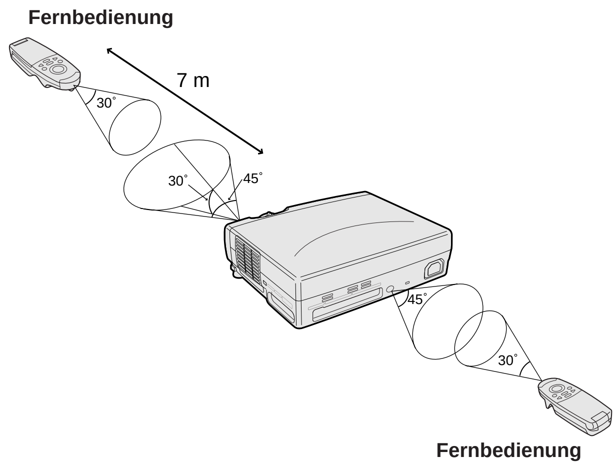
Positionierung der Fernbedienung bzw. des Mausempfängers

- Die Fernbedienung kann zur Steuerung des Projektors innerhalb des unten gezeigten Bereiches verwendet werden.
- Der Fernbedienungs-Mausempfänger kann mit der Fernbedienung zusammen zur Steuerung der Mausfunktion eines angeschlossenen Computers innerhalb des unten gezeigten Bereiches verwendet werden.

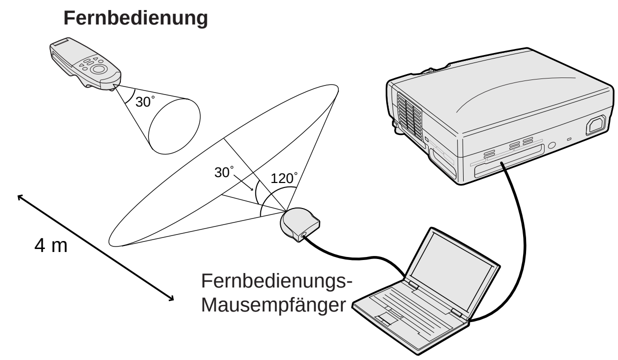
HINWEIS

- Das Signal der Fernbedienung kann für einen einfacheren Betrieb von der Bildwand reflektiert werden. Der wirksame Abstand des Signals kann aufgrund des Materials der Bildwand unterschiedlich sein.

Steuerung des Projektors

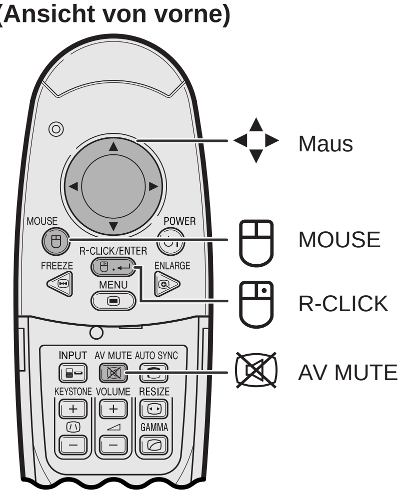


Verwendung der drahtlosen Maus

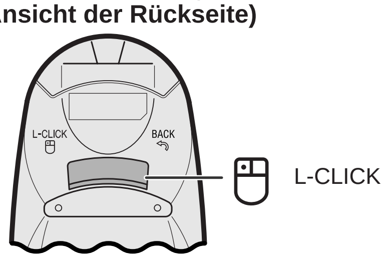


Verwendbare Tasten in der MOUSE-Betriebsart

Fernbedienung (Ansicht von vorne)



Fernbedienung (Ansicht der Rückseite)



Verwendung als eine drahtlose Maus

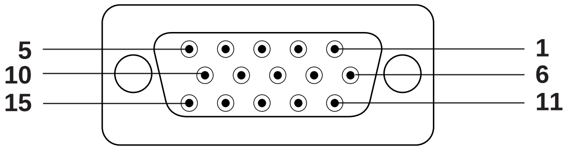
- Beim Drücken von **MOUSE** leuchten die Tasten auf der Fernbedienung auf und die Fernbedienung wird auf die MOUSE-Betriebsart eingestellt.
- Während der MOUSE-Betriebsart kann der Cursor als Zeiger verwendet werden. Die MOUSE-Betriebsart wird etwa 10 Sekunden während des Aufleuchtens der Tasten eingestellt.
- Beim Drücken von **MENU** oder **ENLARGE** wird die MOUSE-Betriebsart beendet und die normale Betriebsart wieder eingestellt.
- Sicherstellen, daß der mitgelieferte Fernbedienungs-Mausempfänger am Computer angeschlossen ist.

HINWEIS

- Die drahtlose Maus kann nicht richtig funktionieren, wenn der serielle Port des Computers nicht richtig eingestellt ist. Siehe die Bedienungsanleitung des Computers für Hinweise zur Einstellung bzw. Installation des Maustreibers.
- Für eintastige Systeme kann sowohl **L-CLICK** als auch **R-CLICK** verwendet werden.

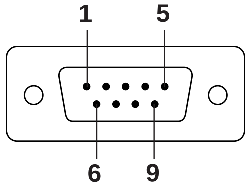
Pin-Belegung

Computer-Eingangsport 1 (COMPUTER INPUT 1): 15-Pin Mini-D-Sub-Buchse



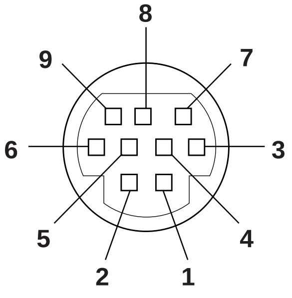
Computereingang
Analog
1. Videoeingang (rot)
2. Videoeingang (Grün/Sync. auf Grün)
3. Videoeingang (blau)
4. Nicht belegt
5. Gemischtes Sync.-Signal
6. MASSE (rot)
7. MASSE (Grün/Sync. auf Grün)
8. MASSE (blau)
9. Nicht belegt
10. Nicht belegt
11. MASSE
12. Bi-direktionale Daten
13. Horizontales Sync.-Signal
14. Vertikales Sync.-Signal
15. Daten-Zeitgeber

RS-232C-Anschlußstelle: 9-Pin D-Sub-Stecker des DIN-D-Sub RS-232C-Kabels



Pin Nr.	Signal	Name	E/A	Referenz
1				Nicht angeschlossen
2	RD	Daten empfangen	Eingang	An internen Schaltkreis angeschlossen
3	SD	Daten senden	Ausgang	An internen Schaltkreis angeschlossen
4				Nicht angeschlossen
5	SG	Signalerdung		An internen Schaltkreis angeschlossen
6				Nicht angeschlossen
7				Nicht angeschlossen
8				Nicht angeschlossen
9				Nicht angeschlossen

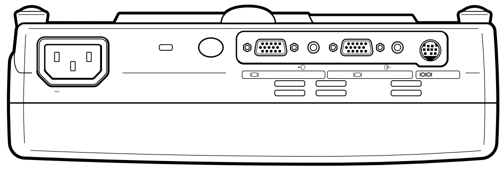
RS-232C-Anschlußstelle: 9-Pin Mini DIN-Steckanschluß



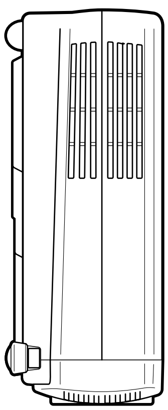
Pin Nr.	Signal	Name	E/A	Referenz
1				Nicht angeschlossen
2	RD	Daten empfangen	Eingang	An internen Schaltkreis angeschlossen
3	SD	Daten senden	Ausgang	An internen Schaltkreis angeschlossen
4				Nicht angeschlossen
5	SG	Signalerdung		An internen Schaltkreis angeschlossen
6				Nicht angeschlossen
7				Nicht angeschlossen
8				Nicht angeschlossen
9				Nicht angeschlossen

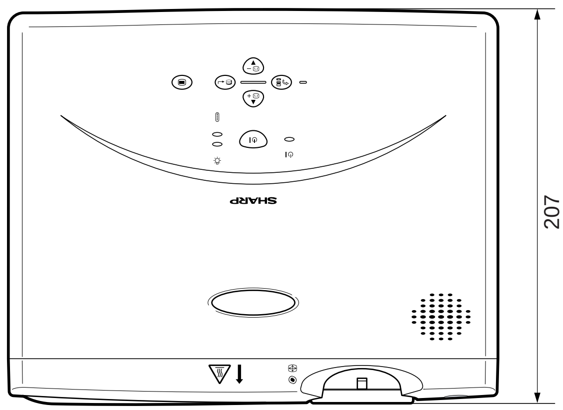
Abmessungen

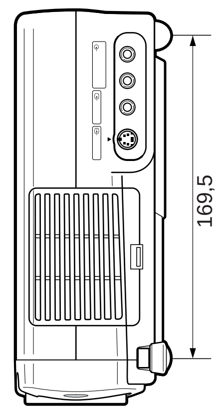
Ansicht der Rückseite



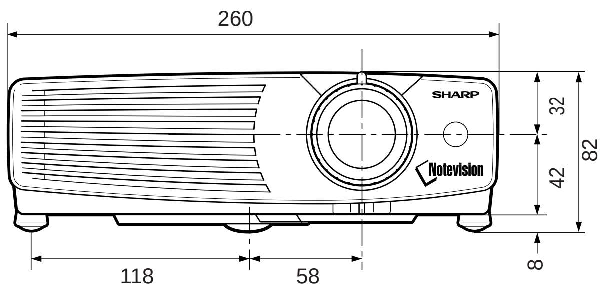
Ansicht von oben



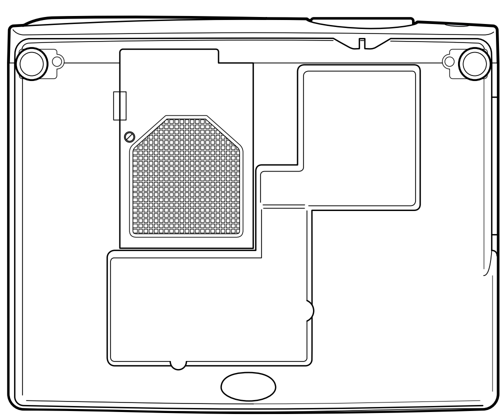




Seitenansicht



Ansicht von vorne



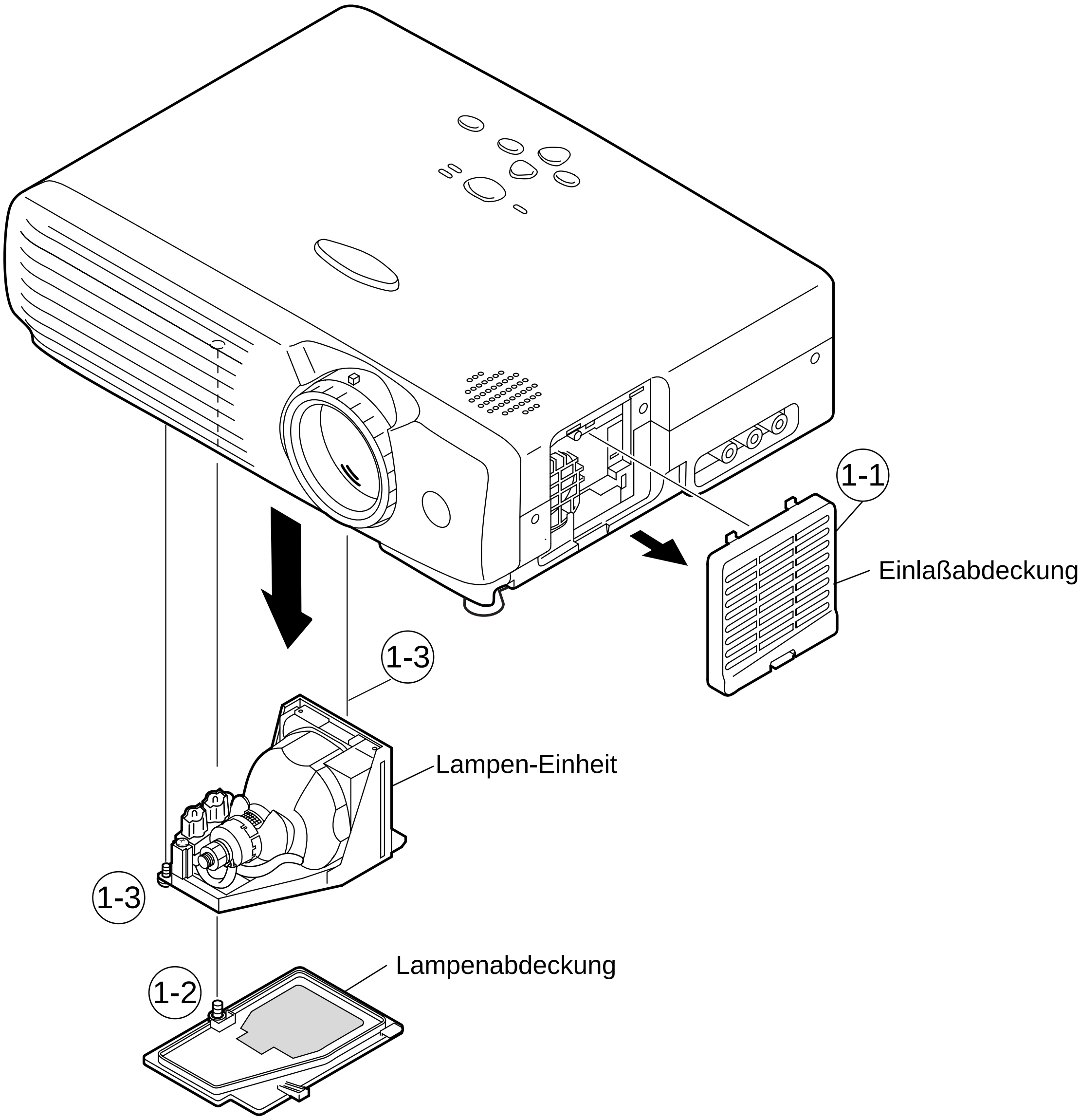
Anhang Ansicht von unten

Einheit:mm

ENTFERNEN DER HAUPTTEILE

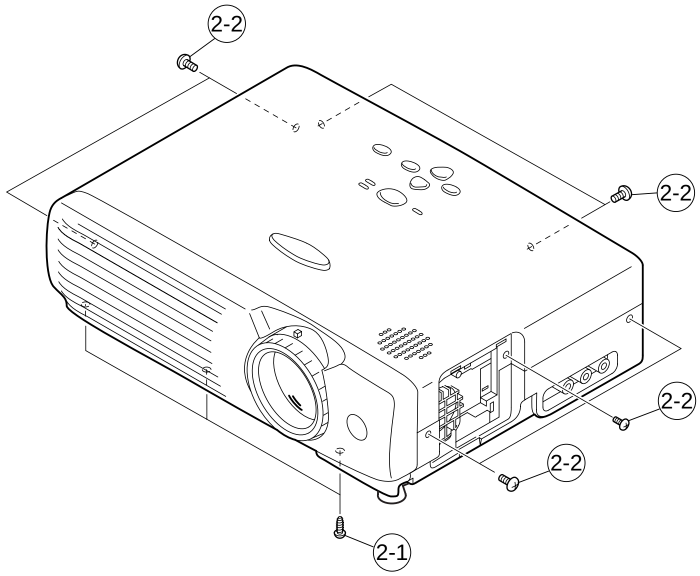
1. Abnehmen der Einlaßabdeckung und der Lampen-Einheit.

1-1. Die Einlaßabdeckung abnehmen.
1-2. Die Halteschraube aus der Lampenabdeckung herausdrehen, dann die Lampenabdeckung abnehmen.
1-3. Die beiden Halteschraube aus der Lampen-Einheit herausdrehen, dann die Lampen-Einheit ausbauen.

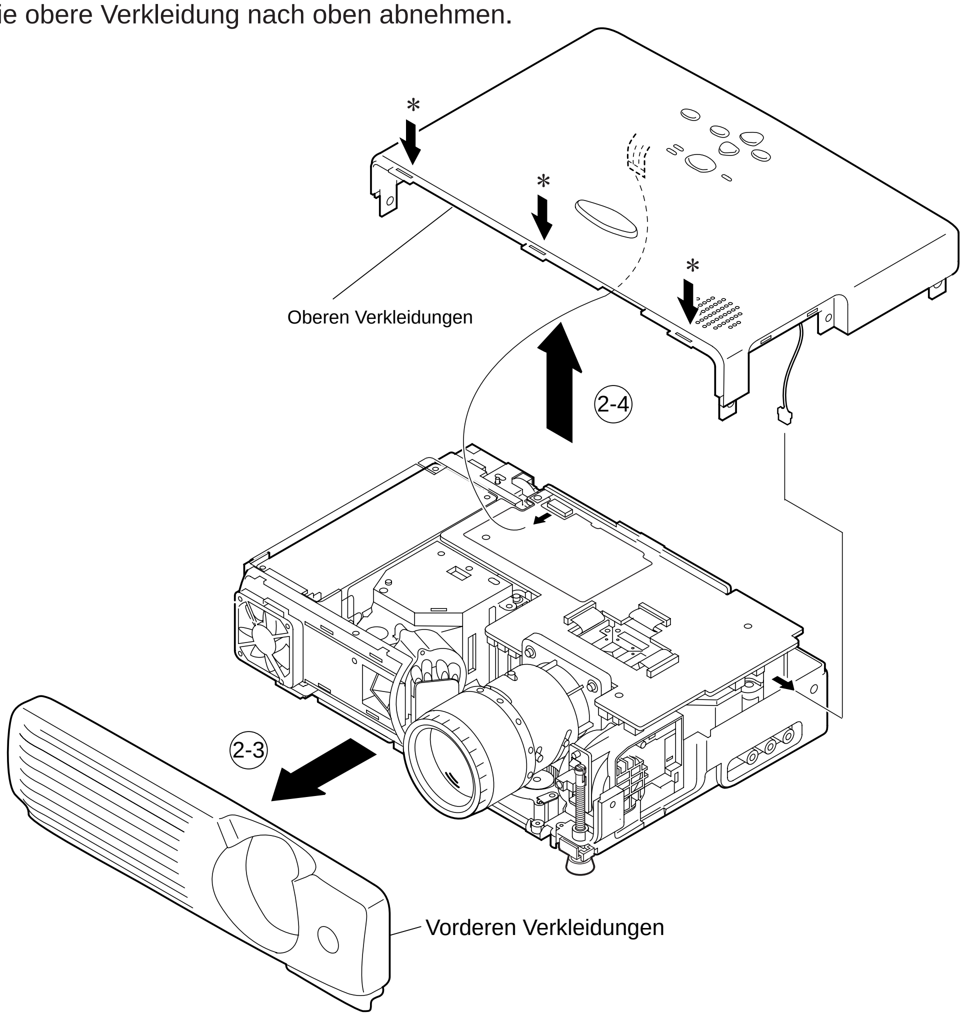


2. Abnehmen der vorderen und oberen Verkleidungen

2-1. Die drei Halteschrauben (silberfarben) aus der vorderen Verkleidung herausdrehen.
2-2. Die sieben Halteschrauben (silberfarben) aus der oberen Verkleidung herausdrehen.

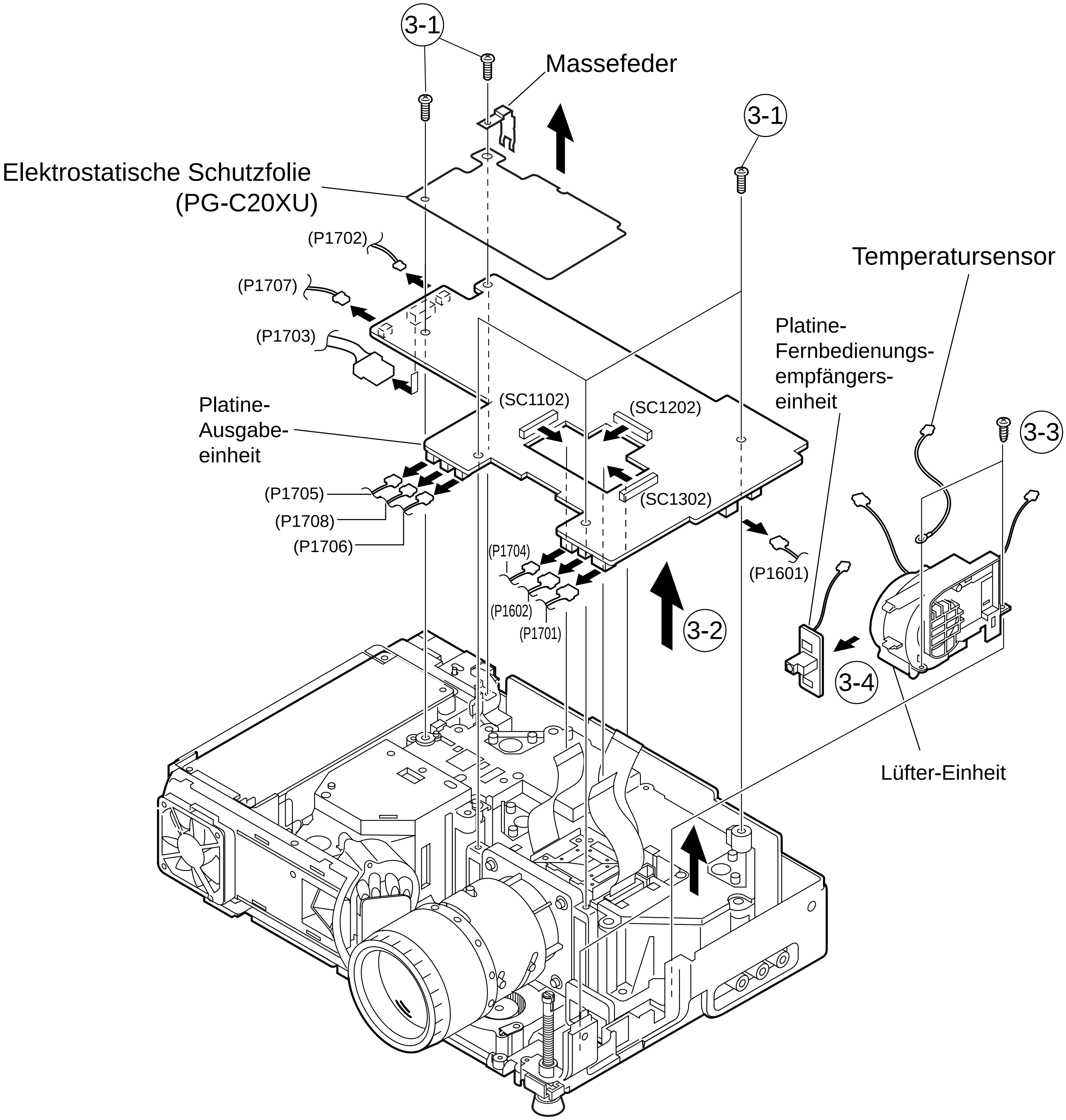


2-3. Die mit * markierten Stellen der oberen Verkleidung nach unten drücken, um die Haken zu lösen; danach die obere Verkleidung abnehmen.
2-4. Die obere Verkleidung vorsichtig anheben, die Stecker von der Steuertafel und dem Lautsprecher abziehen, dann die obere Verkleidung nach oben abnehmen.



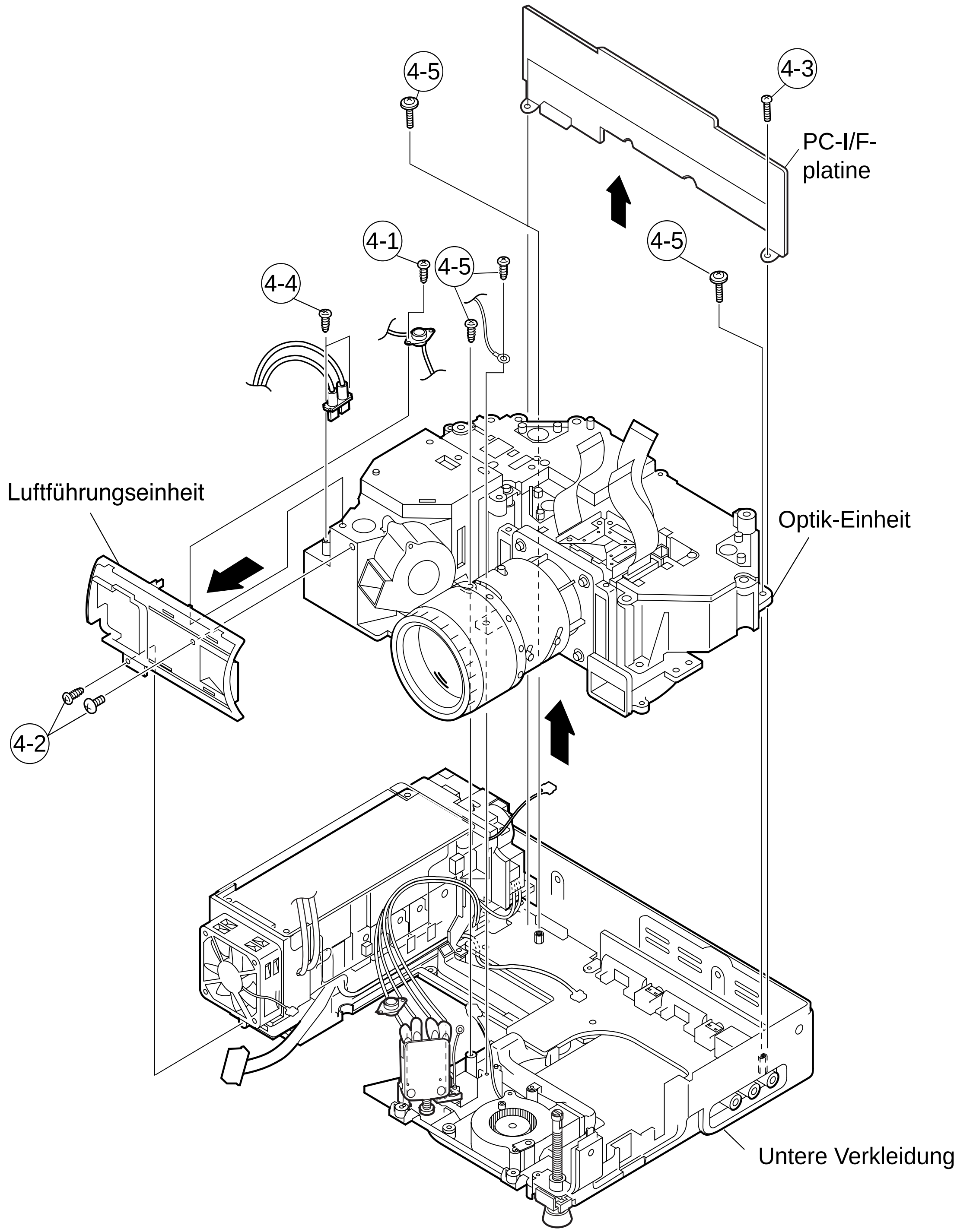
3. Ausbau der Platine-Ausgabeeinheit, des Fernbedienungs-Sensors, der Platine-Empfängereinheit für die Fernbedienung und der Lüfter-Einheit

3-1. Die fünf Halteschrauben (gelb) aus der Platine-Ausgabeeinheit herausdrehen.Die Massefeder und die elektrostatische Schutzfolie entfernen.
3-2. Die Platine-Ausgabeeinheit anheben, die Stecker abziehen, dann die Platine-Ausgabeeinheit herausheben.
3-3. Die beiden Halteschrauben (schwarz) aus der Ansaug-Lüftereinheit herausdrehen, dann die Ansaug-Lüftereinheit und den Temperatursensor ausbauen.
3-4. Die Haken der Ansaug-Lüftereinheit von der Fernbedienungsempfänger-Platineneinheit lösen, dann diese Baugruppe herausnehmen.



4.Ausbau der vorderen Luftführungseinheit, PC-I/F-platine und der Optik-Einheit

4-1. Die Halteschraube (silberfarben) aus dem Bimetall herausdrehen, dann das Bimetall abnehmen.
4-2. Die beiden Halteschrauben (eine schwarze und eine silberfarbene) aus der vorderen Luftführungseinheit herausdrehen, dann die vordere Luftführungseinheit ausbauen.
4-3. Die beiden Halteschrauben (gelb) aus der PC-I/F-platine herausdrehen. Die PC-I/F-platine von oben herausnehmen.
4-4. Die beiden Halteschrauben (silberfarben) aus dem Lampenfassungshalter herausdrehen, dann den Lampenfassungshalter ausbauen.
4-5. Die vier Halteschrauben (zwei schwarze und zwei gelbe) aus der Optik-Einheit herausdrehen, dann die Optik-Einheit von oben herausnehmen.



5. Ausbau der Ballast-/Leistungs-/Netzeingangseinheit-Platine, des Kühlgebläses und des Spannungswählschalters

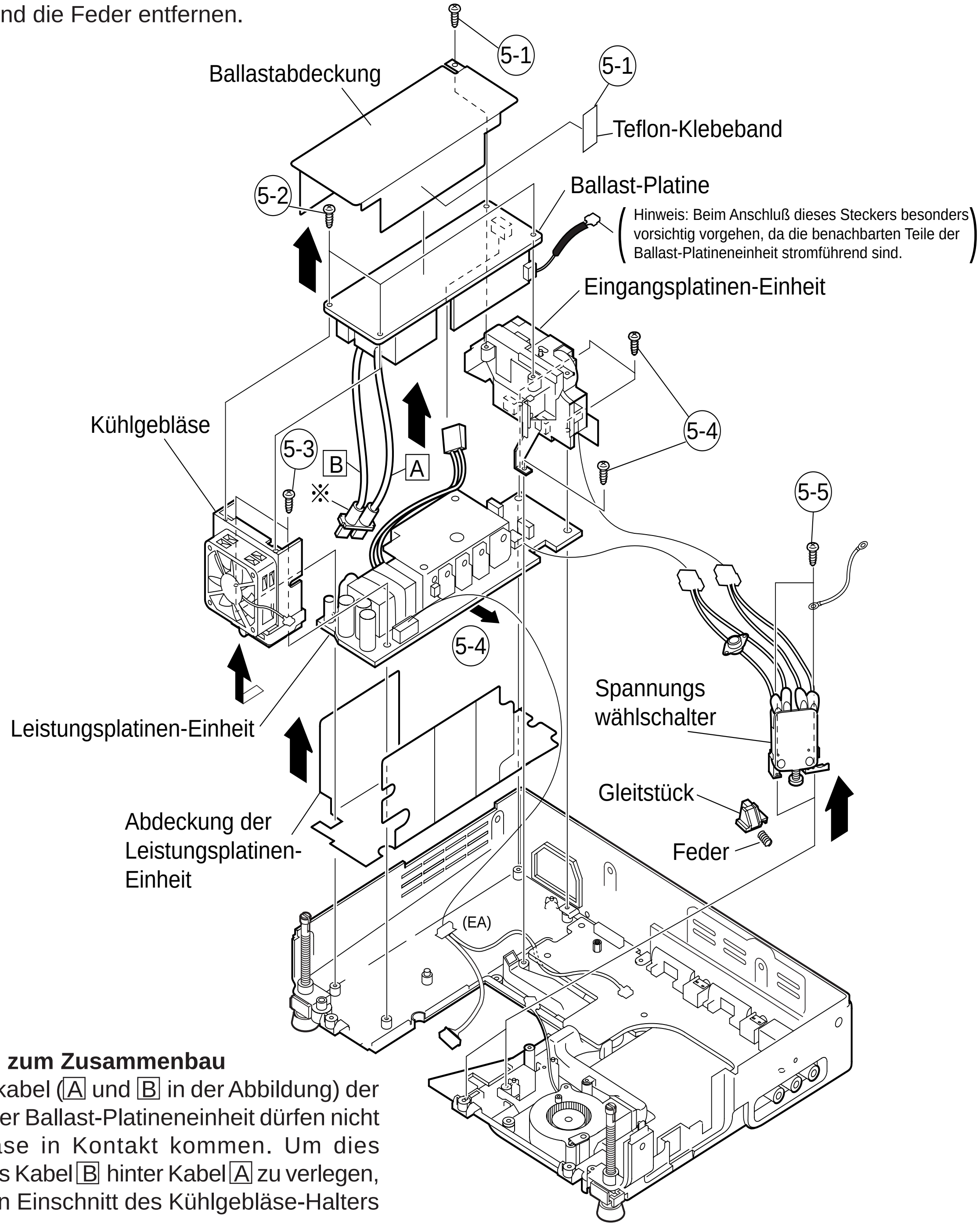
5-1. Die Halteschraube (gelb oder silberfarben) aus der Ballast-Abdeckung herausdrehen. Das Teflon-Klebeband entfernen, das zur Befestigung der Steckerkabel an der Ballast-Abdeckung dient. Die Ballast-Abdeckung herausnehmen.

5-2. Die drei Halteschrauben (gelb oder silberfarben) aus der Ballast-Platineneinheit herausdrehen. Die Stecker aus der Leistungs-Platineneinheit herausdrehen, dann die Ballast-Platineneinheit entfernen.

5-3. Die beiden Halteschrauben (silberfarben) aus der Kühlgebläse-/Leistungs-Platineneinheit entfernen, dann die Kühlgebläse-Einheit ausbauen.

5-4. Die drei Halteschrauben (silberfarben) aus der Netzeingangs-/Leistungs-Platineneinheit herausdrehen. Die Stecker des Spannungswählschalters und der Leistungs-Platineneinheit (EA) abziehen. Die Netzeingangs-Platineneinheit, Leistungs-Platineneinheit und die Abdeckung der Leistungs-Platineneinheit herausnehmen.

5-5. Die beiden Halteschrauben (gelb) aus dem Spannungswählschalter herausdrehen, dann den Schraube, das Gleitstück und die Feder entfernen.



※Vorsichtshinweise zum Zusammenbau

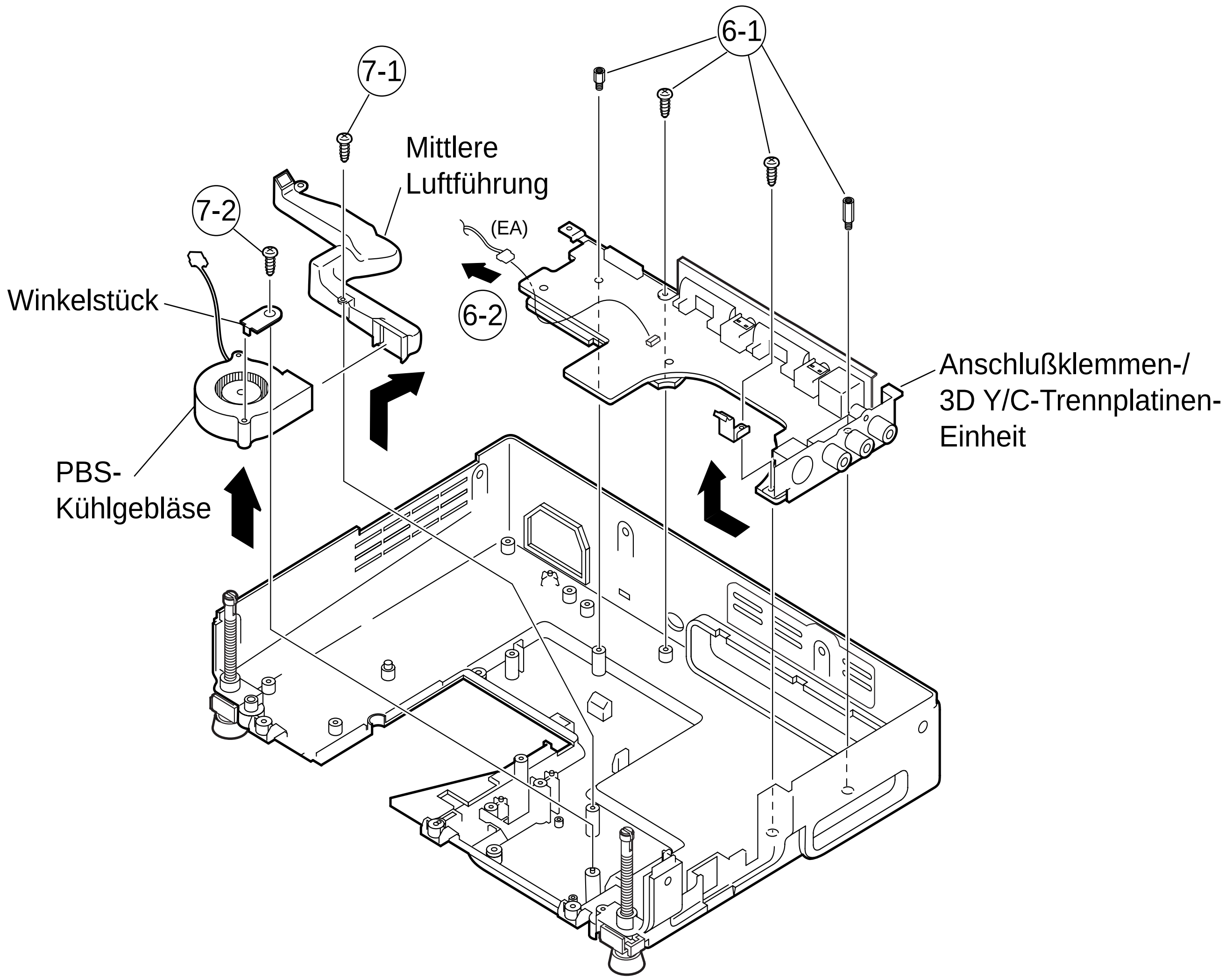
Die Hochspannungskabel (A und B in der Abbildung) der Lampenfassung an der Ballast-Platineneinheit dürfen nicht mit dem Kühlgebläse in Kontakt kommen. Um dies sicherzustellen, ist das Kabel B hinter Kabel A zu verlegen, dann die Kabel in den Einschnitt des Kühlgebläse-Halters einpassen.

6. Ausbau der Anschlußklemmen-/ 3D Y/C-Trennplatinen-Einheit

6-1. Die beiden Halteschrauben (gelb) und die beiden Halterungen aus der Anschlußklemmen-/dreidimensionalen Y/C-Trennplatinen-Einheit herausdrehen. Die Platineneinheit zur Seite schieben und die Anschlußklemmen aus der Bodenplatte herausziehen.
6-2. Den Stecker (EA) von der Anschlußklemmen-Platineneinheit abziehen.

7. Ausbau der mittleren Luftführung und des PBS-Kühlgebläses

7-1. Die Halteschraube von der mittleren Luftführung herausdrehen, dann die mittlere Luftführung abnehmen.
7-2. Die Halteschraube aus dem PBS-Kühlgebläse herausdrehen, dann das Winkelstück und das PBS-Kühlgebläse ausbauen.



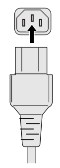
Rückstellen des Lampenbetriebszeit-Timers

● Rückstellen des Lampenbetriebszeit-Timers

Nach dem Auswechseln der Lampe muß der Lampenbetriebszeit-Timer entsprechend den nachfolgenden Anweisungen zurückgestellt werden.

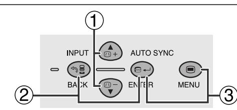
1 Das Netzkabel anschließen.

Das Netzkabel am Steckanschluß des Projektors anschließen.

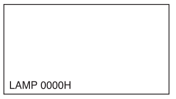


2 Den Lampentimer zurückstellen.

① **KEYSTONE ▲** und **KEYSTONE ▼** auf dem Projektor gleichzeitig drücken.
② **INPUT** und **AUTO SYNC** auf dem Projektor gleichzeitig drücken.
③ **AUTO SYNC** und **MENU** auf dem Projektor gleichzeitig drücken.



"LAMP. 0000H" wird zum Zurückstellen des Lampentimers angezeigt.



● Lichtquelle (Lampe)

Die als Lichtquelle verwendete Lampe weist eine Lebensdauer von ungefähr 1000 Stunden auf. Nachdem die Gesamtbetriebszeit mehr als 900 Stunden beträgt, muß die Lampe so bald wie möglich durch ein Neuteil ersetzt werden (separat erhältlich). Wenn die Abbildung allerdings dunkel oder verschwommen erscheint, bevor die 900 Stunden erreicht sind, muß die Lampe ersetzt werden. Die Gesamtbetriebszeit der Lampe wird am Display angezeigt. Wenn nach dem Ersetzen der Lampe gewisse Farbabweichungen festgestellt werden, muß die auf Seite 58 beschriebene Farbabweichungskorrektur vorgenommen werden.

⚠ CAUTION

- IGefährliche Lichtstrahlen. Niemals beim Betrieb des Projektors in die Öffnung oder das Objektiv schauen.

NOTE

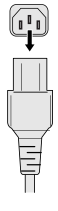
- Wenn die Betriebsumgebung große Unterschiede aufweist, kann die Verwendungdauer der Lampe weniger als 1.000 Stunden betragen.
- Die obige Angabe von "1.000 Stunden" bedeutet eine durchschnittliche Verwendungsdauer und ist nur als Referenz gedacht. Dies unterscheidet sich von der Garantiezeit.
- Aus Sicherheitsgründen wird das Gerät nach dem Ausschalten nicht ein viertes Mal eingeschaltet, ohne daß die Lampe nach einer Nutzungszeit von 1.000 Stunden ausgewechselt wird.

Wartungsanzeige	Symptom	Problem	Abhilfe
Temperaturwarn-anzeige	Die Temperatur im Gerät ist zu hoch.	• Belüftungsöffnungen blockiert.	• Den Projektor an einem besser belüfteten Ort aufstellen.
		• Luftfilter verstopft.	• Den Filter reinigen.
		• Kühlventilator beschädigt. • Interne Schaltkreise	• Den Projektor zu einem von Sharp autorisierten Händler für LCD-Projektoren oder dem Kundendienst zur Reparatur geben.
	Die Anzeige blinkt rot.	• Kühlung des Gerätes	• Warten, bis die Anzeige nicht mehr blinkt und erlischt.
Lamapenaustausch-Anzeige	Die Lampe leuchtet nicht auf.	• Ausgebrannte Lampe. • Lampen-Schaltkreis beschädigt.	• Die Lampe vorsichtig austauschen. • Den Projektor zu einem von Sharp autorisierten Händler für LCD-Projektoren oder dem Kundendienst zur Reparatur geben.
	Die Lampe muß ausgewechselt werden.	• Die Lampe wurde über 900 Stunden verwendet.	
Betriebs-anzeige	Die Anzeige blinkt rot bei eingeschaltetem Projektor.	• Die Filterabdeckung ist offen.	• Die Filterabdeckung richtig anbringen.

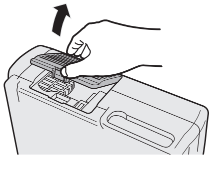
● Auswechseln des Luftfilters

Gleichzeitig mit dem Ersetzen der Lampe ist auch der Luftfilter durch das im Lampen-Ersatzteilesatz enthaltene Neuteil zu ersetzen.

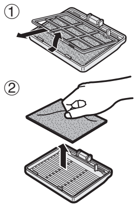
1. Das Netzkabel von der abtrennen.
Das Netzkabel vom Steckanschluß abtrennen.



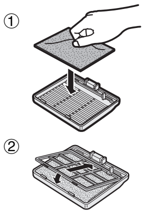
2.Die Filterabdeckung entfernen.
Den Projektor umdrehen. Auf den Vorsprung drücken und die Filter-abdeckung in Pfeilrichtung entfernen..



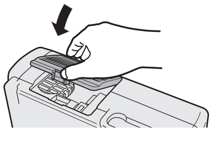
3.Den Luftfilter entfernen.
① Den Luftfilterhalter entfernen.
② Den Luftfilter entfernen.



4.Den Luftfilter anbringen.
① Den neuen Filter in die Halterung setzen.
② Den Luftfilterhalter wieder einsetzen.

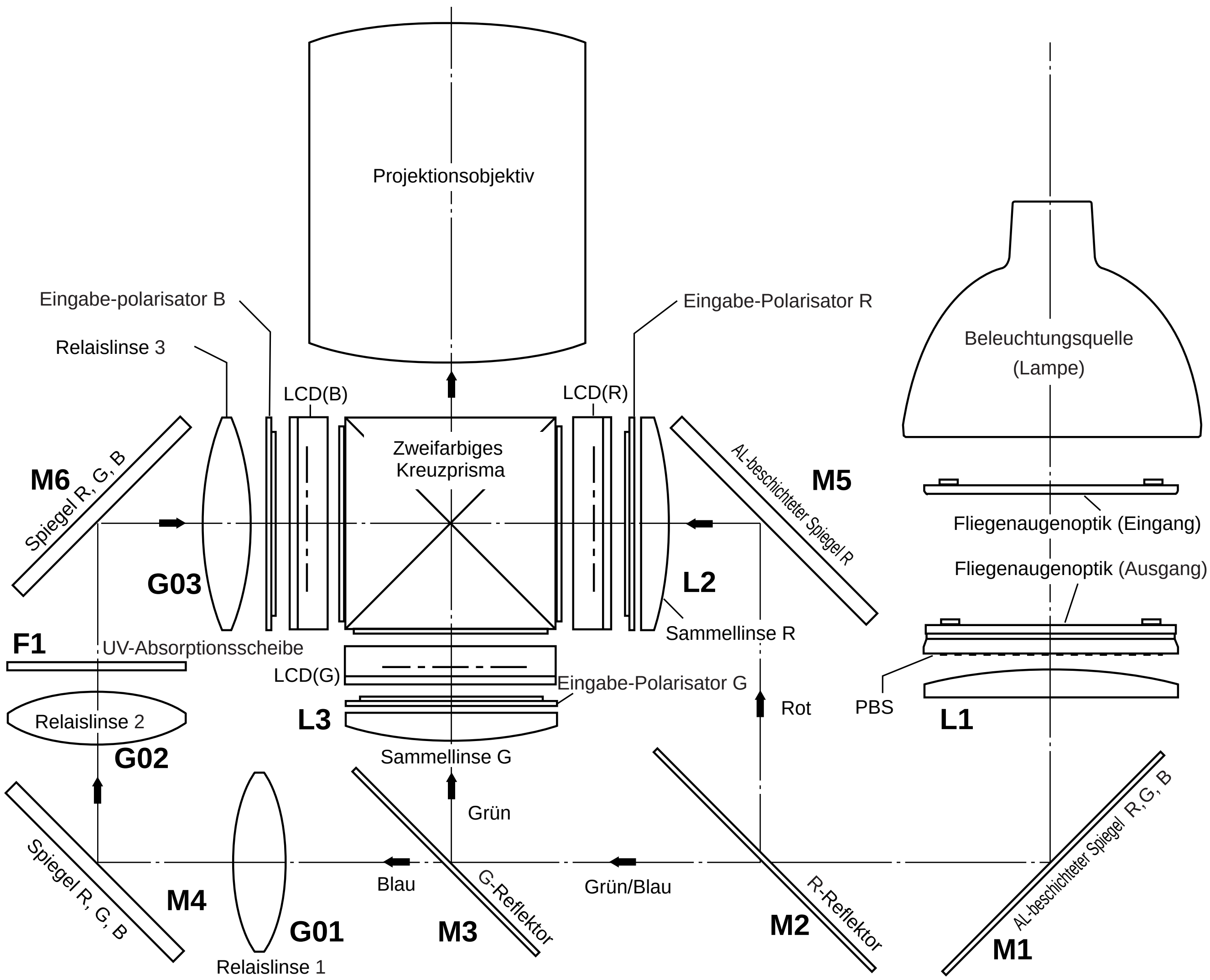


5.Die Filterabdeckung anbringen.
IDie Lasche am Ende der Filterabdeckung in die Öffnung der Filter-abdeckung einsetzen und den Filter fest andrücken.



Beschreibung der Optik-Einheit

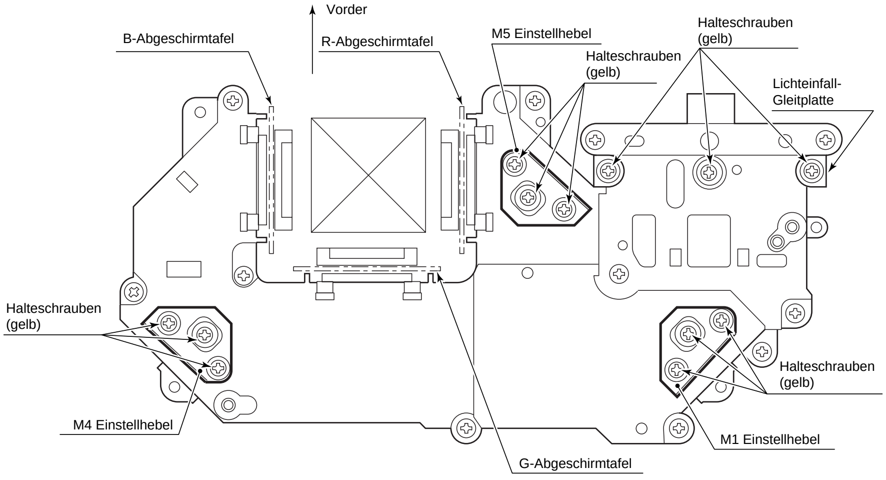
Erläuterungen für das korrekte Setup der optischen Komponenten und Baugruppen (Ansicht von oben)



Einstellen der Spiegel

Diese Einstellung wird erforderlich, wenn eine der Komponenten des optischen Mechanismus ersetzt wurde.

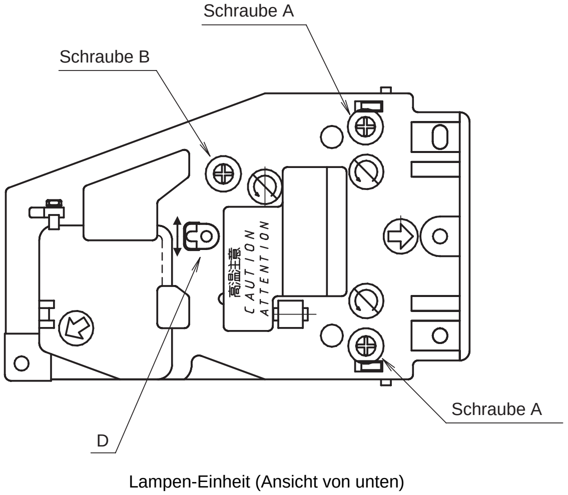
1. Die Flachkabel von allen LCD-Tafeln abziehen.
2. Die Lampe einschalten.
3. Ein Weißlicht-Bild projizieren und überprüfen, ob in irgendeinem Bereich der Abbildung ein Farbton zu sehen ist. Wenn Farbtöne angezeigt werden, die Halteschrauben der Lichteinfall-Gleitplatte lösen, dann die Gleitplatte so einstellen, daß die Abbildung einfarbig weiß erscheint. Danach die Halteschrauben wieder festziehen.
4. Sollte die Einstellung nicht mit den in Schritt 3 gegebenen Anweisungen durchzuführen sein, sind die Einstellhebel M1, M4 und M5 zu verwenden.
5. Bevor der Einstellhebel M5 bewegt wird, müssen die G- und B-Farbstrahlen abgeschirmt werden. (Zum Abschirmen sind Reflexionsfolien zu verwenden, die einfallendes Licht reflektieren.)
6. Die Halteschrauben der Einstellhebel lösen, die Einstellungen vornehmen, dann die Halteschrauben wieder festziehen.
7. Bevor der Einstellhebel M4 bewegt wird, müssen die R- und G-Farbstrahlen abgeschirmt werden.



Korrektur von Farbabweichungen auf einem Nur-Weiß-Bildschirm beim Auswechseln der Lampe

Wenn im rechten und linken Bereich eines Nur-Weiß-Bildschirms nach dem Auswechseln der Lampe Farbabweichungen auftreten, muß die optische Achse der neuen Lampe erneut einjustiert werden. Hierzu wie folgt vorgehen:

1. Die Lampenabdeckung öffnen, dann die Schrauben A, B und C im unteren Bereich der Lampe lösen.
2. Mit Hilfe eines Schraubendrehers oder eines ähnlichen Werkzeugs die U-förmige Rille in Fenster D in Pfeilrichtung schieben.
3. Die Schrauben A, B und C provisorisch festdrehen und die Lampenabdeckung schließen, dann den Nur-Weiß-Bildschirm auf Farbabweichungen überprüfen.
4. Die obigen Schritte 1, 2 und 3 wiederholen, bis keine Farbabweichungen mehr festzustellen sind. Danach die Schrauben A, B und C wieder festziehen.
5. Die Lampenabdeckung wieder in der vorherigen Position anbringen.

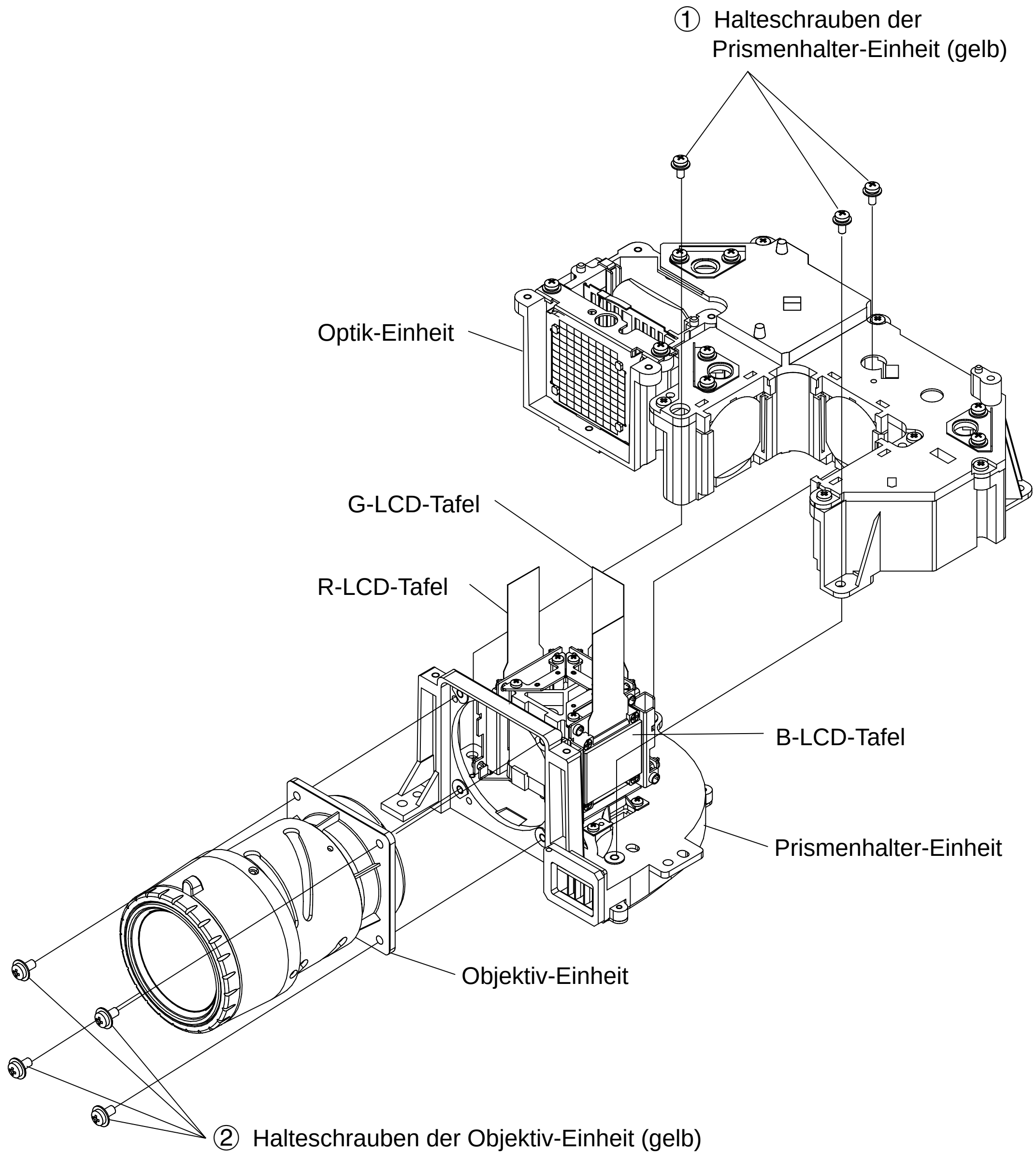


Lampen-Einheit (Ansicht von unten)

Auswechseln der Prismenhalter-Einheit

1. Die drei Halteschrauben herausdrehen, dann die Prismenhalter-Einheit und die Objektiv-Einheit aus der Optik-Einheit herausnehmen.
2. Die vier Halteschrauben entfernen, dann die Prismenhalter-Einheit und die Objektiv-Einheit trennen.
3. Die Prismenhalter-Einheit durch ein Neuteil ersetzen. Die obigen Schritte 1 und 2 in umgekehrter Reihenfolge ausführen.

Hinweis: Selbst wenn auch nur eine der LCD-Tafeln defekt ist, muß die Prismenhalter-Einheit ersetzt werden. Auf keinen Fall nur die defekte LCD-Tafel auswechseln.



ELEKTRISCHE EINSTELLUNGEN

Einen Signalgenerator bzw. einen PC oder Macintosh-Computer an den Projektor anschließen, um die Signale zuzuführen, die in den Einstellbedingungen aufgeführt sind.

ADJUSTMENT PRECAUTIONS

① Vorsichtsmaßnahmen bei der Initialisierung

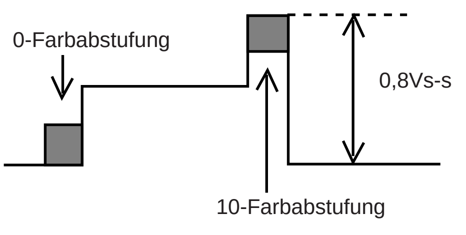
Es dauert nur 5 Sekunden, um den Speicher zu initialisieren und die Anfangseinstellungen zu überschreiben. Bei der Initialisierung wechselt der Bildschirm-Hintergrund der Menüanzeige auf Rot, und die Meldung „INITIALIZE“ erscheint nach dem Betätigen der vorgeschriebenen Taste für 5 Sekunden am Bildschirm. Danach den Geräteschalter ausschalten (und den Netzstecker abziehen).

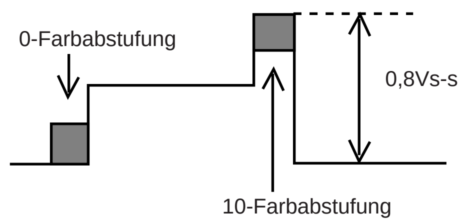
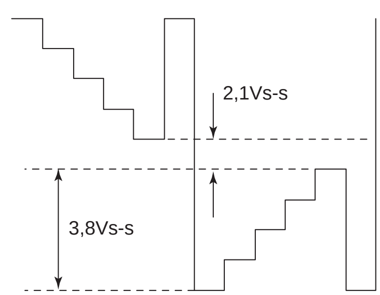
② Anfängliche Werkseinstellungen (S4, S5)

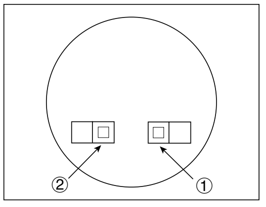
Es dauert 5 Sekunden, um die anfänglichen Werkseinstellungen zu schreiben. Während dieses Vorgangs darf das Gerät nicht ausgeschaltet werden. Um diese Wartezeit sicherzustellen, erscheint "S4" und "S5" für 5 Sekunden in der Anzeige. Nachdem dieses Symbol verschwindet, kann das Gerät eingeschaltet bleiben oder ausgeschaltet werden.

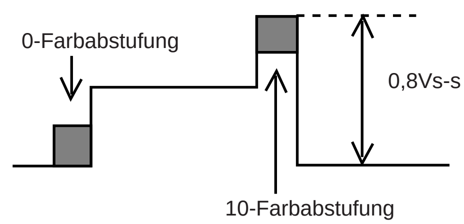
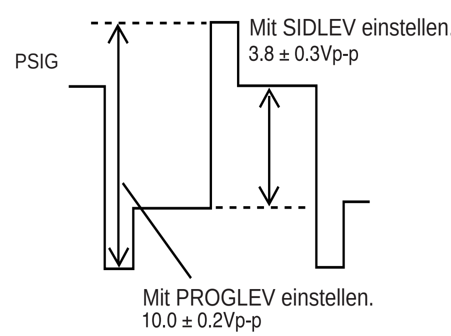
③ Videoeinstellung

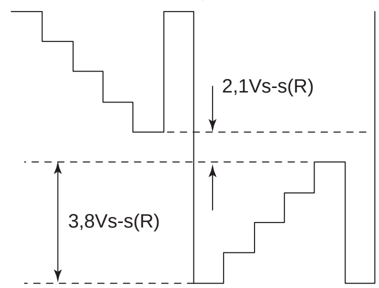
Sicherstellen, daß die Signale während der Videoeinstellung nicht unterbrochen werden.

Nr.	Einstellgegenstand	Einstellbedingungen	Einstellverfahren
1	**EEPROM wird initialisiert**	1. Den Netzschalter einschalten und das Gerät für ca. 15 Minuten vorwärmen lassen. (Sicherstellen, daß die Kontrollampe aufleuchtet.) 2. Die folgende Gruppe, Untergruppe und Position wählen. Gruppe: Option Untergruppe: EEPROM Initialize Position: Initialize Start	● Die folgenden Einstellungen vornehmen: SW1601 drücken, um den Prozeßmodus aufzurufen. Das EEPROM initialisieren, indem Initialize Start ausgeführt wird. (Nach der Ausführung von Initialize Start ist es nicht erforderlich, den EEPROM-Speicher erneut zu initialisieren - es sei denn, die Stromversorgung wird unterbrochen.)
2	**Helligkeits-einstellung**	1. Das XGA 10-Stufensignal zuführen. 2. Die folgende Gruppe, Untergruppe bzw. Positionen wählen. Gruppe: Adjust PC Image Untergruppe: AD Position: R-Bright(bei R-Einstellung) G-Bright (bei G-Einstellung) B-Bright(bei B-Einstellung) 3. Das Synchroskop (0,2 V-Teilung) mit den folgenden TPs verbinden. Bei R-Einstellung TP1403 Bei G-Einstellung TP1402 Bei B-Einstellung TP1401	● Die Einstellung gerade vornehmen, wo sich der 0-Farbtonpegel bewegt. 

Nr.	Einstellgegenstand	Einstellbedingungen	Einstellverfahren
3	**Einstellung des RGB-Antriebs**	1. Das XGA 10-Stufensignal zuführen. 2. Die folgende Gruppe, Untergruppe bzw. Positionen wählen. Gruppe: Adjust PC Image Untergruppe: AD Position: R-Contrast (bei R-Einstellung) G-Contrast (bei G-Einstellung) B-Contrast (bei B-Einstellung) 3. Das Synchroskop (0,2 V-Teilung) mit den folgenden TPs verbinden. Bei R-Einstellung TP1403 Bei G-Einstellung TP1402 Bei B-Einstellung TP1401	● Zuerst eine Einstellung vornehmen, wo sich der 10-Farbtonpegel sättigt. Danach ist die Einstellung um einen Punkt zu erniedrigen. 
4	**Einstellung der Platinen-Eingangs-signalamplitude**	1. Die folgende Gruppe, Untergruppe bzw. Positionen wählen. Gruppe: Adjust PC Image Untergruppe: CXA2111R Position: AMP-R-GAIN (Bei R-Einstellung) AMP-R-BLK (Bei R-Einstellung) AMP-G-GAIN (Bei G-Einstellung) AMP-G-BLK (Bei G-Einstellung) AMP-B-GAIN (Bei B-Einstellung) AMP-B-BLK (Bei B-Einstellung) 2. Das Synchroskop mit den folgenden TPs verbinden. Bei R-Einstellung TP1101 Bei G-Einstellung TP1201 Bei B-Einstellung TP1301 3. Das XGA-10-Stufen-Signal zuführen.	1.AMP-R-GAIN wählen, dann die Signalamplitude auf 3,8 ± 0,1 einstellen. 0,1 Vs-s wählen. 2.AMP-R_BLK wählen, dann die Weiß-Weiß-Signalamplitude auf 2,0 ± 0,1 Vs-s einstellen. Hinweis: Sich vergewissern, daß die Schwarzseite nicht die GAIN-Einstellung behindert. Die Amplituden für G und B sind auf die gleiche Weise einzustellen. 
5	**Muster- und Halteimpulsphase**	1. Das Monochrom-Signal des XGA-Modus zuführen. 2. Die folgende Gruppe, Untergruppe bzw. Positionen wählen. Gruppe: LCD2 (6050) Untergruppe: CLDLY Position: R_CLDLY G_CLDLY B_CLDLY R_REVCLDLY G_REVCLDLY B_REVCLDLY	● Das G-Signal (30%) zuführen, um zu sicherzustellen, daß der Bildschirm keinen vertikalen Streifen aufweist. Falls dies der Fall ist, die Einstellung innerhalb von 160 und 200 vornehmen. Sicherstellen, daß R- und B-Einstellwerte wie folgt sind: R_CLDLY 171 R_REVCLDLY 175 B_CLDLY 175 B_REVCLDLY 178

Nr.	Einstellgegenstand	Einstellbedingungen	Einstellverfahren
6	**Einstellung der RGB-Gegenspannung**	1. Ein Gegenspannungs-Einstellsignal im XGA-Modus zuführen 2. Die folgende Gruppe, Untergruppe bzw. Positionen wählen. Gruppe: LCD2 (6050) Untergruppe: COM Position: R_LCCOM (Bei R-Einstellung) G_LCCOM (Bei G-Einstellung) B_LCCOM (Bei B-Einstellung) R_REVLCOM (Bei umgekehrter R-Einstellung) G_REVLCOM (Bei umgekehrter G-Einstellung) B_REVLCOM (Bei umgekehrter B-Einstellung)	● Den Steuerschalter des Geräts oder die Taste der Fernbedienungseinheit verwenden, um die Einstellung so vorzunehmen, daß das Bildschirmflickern auf ein Minimum reduziert ist. ● Die Einstellung so vornehmen, daß sich das Bild im Mittelpunkt des Bildschirms befindet.
7	**Einstellung der RGB-Farbton-wiedergabe**	1. Ein Nur-Grün-SMPTE- Signal zuführen. (XGA) 2. Die folgende Gruppe, Untergruppe bzw. Positionen wählen. Gruppe: Adjust PC Image Untergruppe: CXA2111R Position: AMP-R-BLK	● Die AMP-BLK-Einstellung so vornehmen, daß die Farbabstufung von Bereich ① (95% und 100% weiß) nur noch schwach erkennbar sind, wie in der Abbildung gezeigt. ● Sich vergewissern, daß die Farbabstufung von Bereich ② (0% und 5% schwarz) noch erkennbar ist. 
8	**RGB-Weißbalance**	1. Das 32-Stufen-Grauskala-Signal zuführen. (XGA) 2. Die folgende Gruppe, Untergruppe bzw. Positionen wählen. Gruppe: Adjust PC Image Untergruppe: CXA2111R Position: AMP-R-BLK (Bei R-Einstellung) AMP-B-BLK (Bei B-Einstellung)	● Die Daten einstellen, um die beste Farbtonbalance zu erzielen.
9	**Einstellung der Horizontalmitte**	1. Das NTSC-Monoskop-signal zuführen. 2. Die folgende Gruppe, Untergruppe und Position wählen. Gruppe: Adjust VIDEO Image Untergruppe: VPC3230 Position: H-Position	● Sicherstellen, das die Einstellung dem Wert 52 entspricht.

Nr.	Einstellgegenstand	Einstellbedingungen	Einstellverfahren
10	**Einstellung der Video-Helligkeit (BRIGHTNESS)**	1. Das NTSC 10-Stufensignal zuführen. 2. Die folgende Gruppe, Untergruppe und Position wählen. Gruppe: Adjust VIDEO Image Untergruppe: VPC3230 Position: Bright	● Sicherstellen, daß die Einstellung der nachfolgenden Beschreibung entspricht. PG-C20XU 142 PG-C20XE 145
11	**Einstellung des Video-Kontrasts (CONTRAST)**	1. Das NTSC 10-Stufensignal zuführen. 2. Die folgende Gruppe, Untergruppe und Position wählen. Gruppe: Adjust VIDEO Image Untergruppe: VPC3230 Position: Contrast 3. Das Synchroskop mit TP1402 verbinden.	● Zuerst eine Einstellung vornehmen, wo sich der 10-Farbtonpegel sättigt. Danach ist die Einstellung um einen Punkt zu erniedrigen. 
12	**Einstellung der Farbsättigung**	1. Das JA-8CH-Signal zuführen. 2. Die folgende Gruppe, Untergruppe und Position wählen. Gruppe: Adjust VIDEO Image Untergruppe: VPC3230 Position: Color 3. Das Synchroskop mit TP1403 verbinden.	● Sicherstellen, das die Einstellung dem Wert 128 entspricht.
13	**PSIG-Einstellung**	1. Die folgende Gruppe, Untergruppe bzw. Positionen wählen. Gruppe: Adjust VIDEO Image Untergruppe: CXA2111R Position: PRGLEV SIDLEV 2. Das Synchroskop mit TP1210 verbinden. 3. Das NTSC 10-Stufen-Eingangssignal zuführen und dann sicherstellen, daß keine vertikalen Streifen im Abstund von jeweils 12 Punkten erscheinen. (Wenn weiße oder schwarze Vertikalstreifen erscheinen, muß die SIDLEV-Einstellung durchgeführt werden.)	 ● Sicherstellen, daß die Einstellung der nachfolgenden Beschreibung entspricht. PRGLEV .... 61 SIDLEV 170

Nr.	Einstellgegenstand	Einstellbedingungen	Einstellverfahren
14	**Einstellung der Eingangs-signal-Amplitude des VIDEO-Eingabefelds**	1. Die folgende Gruppe, Untergruppe bzw. Positionen wählen. Gruppe: Adjust VIDEO Image Untergruppe: CXA2111R Position: AMP-R-Gain (Bei R-Einstellung) AMP-R-BLK (Bei R-Einstellung) AMP-G-Gain (Bei G-Einstellung) AMP-G-BLK (Bei G-Einstellung) AMP-B-Gain (Bei B-Einstellung) AMP-B-BLK (Bei B-Einstellung) 2. Das Synchroskop mit den folgenden TPs verbinden. Bei R-Einstellung TP1101 Bei G-Einstellung TP1201 Bei B-Einstellung TP1301 3. Das NTSC 10-Stufensignal zuführen.	1. AMP-R-Gain wählen, dann die Signalamplitude auf 3,8 ± 0,1 Vs-s einstellen. 2. AMP-R-BLK wählen, dann die Signalamplitude des Weiß-Weiß-Signals auf 2,1 ± 0,1 Vs-s einstellen. 3. AMP-G-Gain wählen, dann die Signalamplitude auf 3,5 ± 0,1 Vs-s einstellen. 4. AMP-G-BLK wählen, dann Signalamplitude des Weiß-Weiß-Signals auf 2,6 ± 0,1 Vs-s einstellen. 5. AMP-B-Gain wählen, dann die Signalamplitude auf 3,5 ± 0,1 Vs-s einstellen. 6. AMP-B-BLK wählen, dann Signalamplitude des Weiß-Weiß-Signals auf 2,6 ± 0,1 Vs-s einstellen. Hinweis:Sich vergewissern, daß die Schwarzseite nicht die GAIN-Einstellung behindert. 
15	**VIDEO-Weißbalance**	1. Das 32-Stufen-Grauskala-Signal zuführen. (VIDEO) 2. Die folgende Gruppe, Untergruppe bzw. Positionen wählen. Gruppe: Adjust VIDEO Image Untergruppe: CXA2111R Position: AMP-R-BLK (Bei R-Einstellung) AMP-B-BLK (Bei B-Einstellung)	● Die Daten einstellen, um die beste Farbtonbalance zu erzielen.
16	**Automatische Korrektur von Farbabweichungen**	1. Die automatische Korrektur von Farbabweichungen kann mit dem automatischen Farbabweichungs-Korrektur-system durchgeführt werden.	● Sich vergewissern, daß keine auffällige Farbungleichheit am Bildschirm zu sehen ist.
17	**Überprüfung der Farben-Leistungswerte**	1. Das Farbbalkensignal zuführen.	● Benutzereinstellung: Die Farbe und die Tönung überprüfen.
18	**Überprüfung der Video-Leistungswerte**	1. Ein Monoskopmuster-signal zuführen.	● Benutzereinstellung: Die Geräteleistung in bezug auf Kontrast, Helligkeit und Schärfe überprüfen.

Nr.	Einstellgegenstand	Einstellbedingungen	Einstellverfahren
19	**Überprüfung der Audio-Leistungswerte**	1. Ein Audiosignal zuführen.	● Benutzereinstellung: Die Lautstärkeleistung überprüfen.
20	**Überprüfung der RGB-Leistungswerte**	1. Das RGB-Signal empfangen.	● Benutzereinstellung: Die Geräteleistung in bezug auf Kontrast, Helligkeit, Rot, Blau, Takt, Phase, H-POS und V-POS überprüfen.
21	**Überprüfen der DVD-Leistung**	1. Das 480I-Signal empfangen.	● Benutzereinstellung: Die Geräteleistung in bezug auf Kontrast, Helligkeit, Farbe, Tönung und Schärfe überprüfen.
22	**Thermistor-Leistungsprüfung**	1. Den Thermistor mit einem Haartrockner erwärmen.	● Sich vergewissern, daß die angegebene Temperatur erreicht ist.
23	**Überprüfung der Auto-Sync-Leistungswerte.**	1. Ein Phasenprüfmuster-Signal zuführen.	● In den Modi VGA, SVGA, XGA und SXGA sich vergewissern, daß die Einstellwerte für Taktgeber, Phase, H-Pos und V-Pos automatisch eingestellt werden können.
24	**Überprüfung der Trapezverzerrungs-Korrektur**		● Sich vergewissern, daß die Trapezverzerrung korrigiert werden kann.
25	**Überprüfung der Lampen-Umschaltleistung**		● Sich vergewissern, daß die Helligkeit mit dem Benutzer-Lampenregler verändert werden kann.
26	**Ausgabe-Einstellwerte**		● Die folgenden Einstellung vornehmen:

Auslieferungsland (Modell)	Prozeß-Einstellung	Einstellung der Fernbedienung
US (XU)	S4	Werkseinstellung bei 4
Europa (XE)	S4	Werkseinstellung bei 4

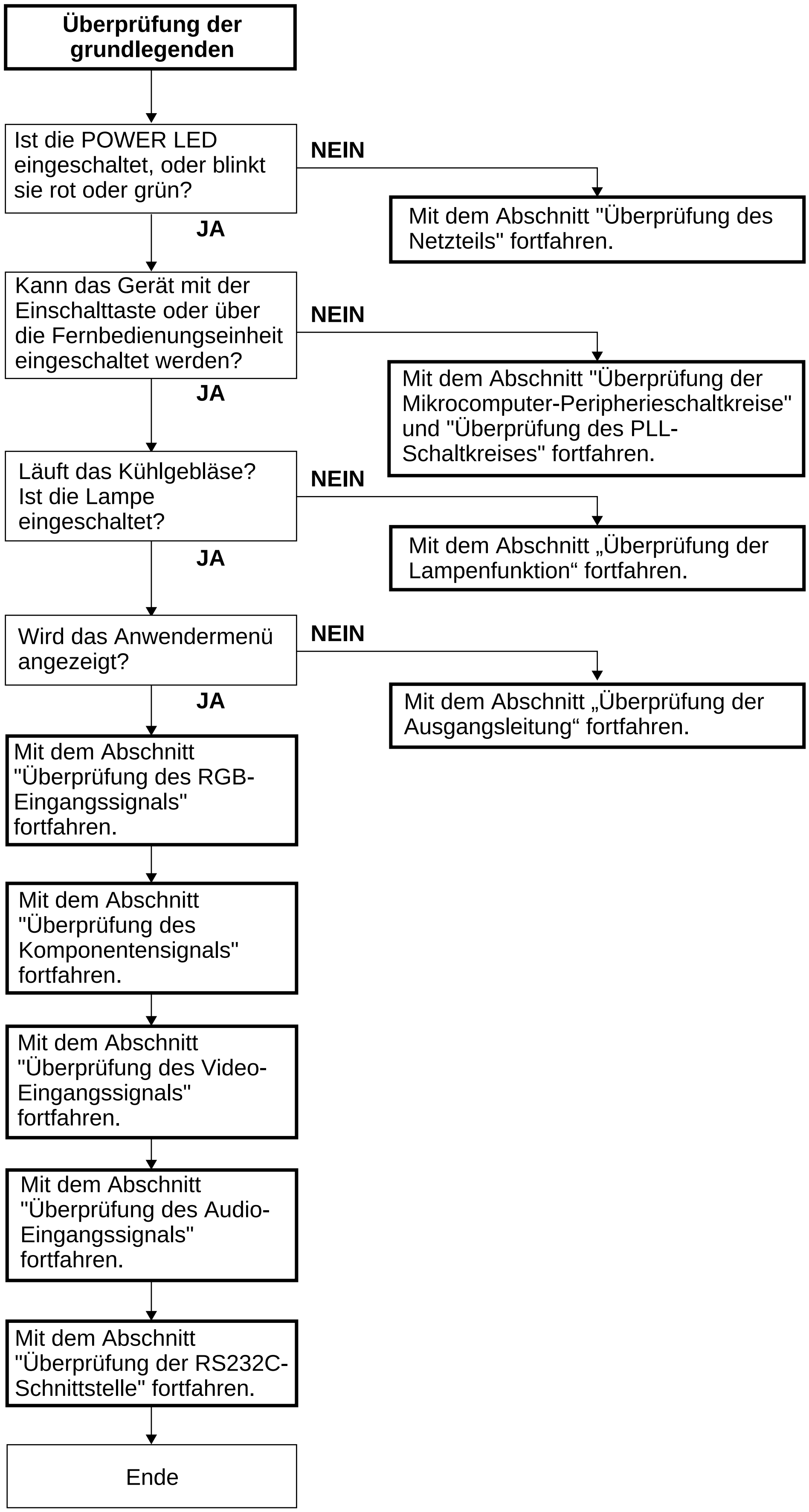
Prozeßmenü 1

Gruppe	Untergruppe	Position
Adjust PC Image	AD	R-Bright
		R-Contrast
		G-Bright
		G-Contrast
		B-Bright
		B-Contrast
	CXA2111R	AMP-R-BLK
		AMP-R-GAIN
		AMP-G-BLK
		AMP-G-GAIN
		AMP-B-BLK
		AMP-B-GAIN
		AMP-BLK
		AMP-GAIN
Adjust VIDEO Image	VPC3230	Bright
		Contrast
		Color
		H-Position
		AGC
	CXA2111R	AMP-R-BLK
		AMP-R-Gain
		AMP-G-BLK
		AMP-G-Gain
		AMP-B-BLK
		AMP-B-Gain
		CLPLVL
		PRGLEV
		SIDLEV
Adjust Component (480I)	VPC3230	Bright
		Contrast
		Color
	CXA2111R	AMP-R-Gain
		AMP-G-Gain
		AMP-B-Gain
		AMP-R-BLK
		AMP-G-BLK
		AMP-B-BLK
LCD5(CXA1839)(480P) (Das Menü erscheint auf dem Bildschirm. Benutzen Sie dieses Menü jedoch nicht, da dieses Modell nicht mit der DTV-Funktion ausgestattet ist.)		DTV_Bright
		DTV_Contrast
		DTV_Color
		DTV_Tint
LCD2 (6050)	NRS	NRS-H
		NRS-L
	COM	R_LCCOM
		G_LCCOM
		B_LCCOM
		R_REVLCCOM
		G_REVLCCOM
		B_REVLCCOM

Prozeßmenü 2

Gruppe	Untergruppe	Position
LCD2 (6050)	CLDLY	R_CLDLY
		G_CLDLY
		B_CLDLY
		R_REVCLDLY
		G_REVCLDLY
		B_REVCLDLY
LCD3 (Adjust GA4)	GHOST	R_GHOST
		G_GHOST
		B_GHOST
		R_GHOST_W
		G_GHOST_W
		B_GHOST_W
	CK-PHASE	RCK-PHASE
		GCK-PHASE
		BCK-PHASE
LCD4 (Adjust Conv)	Adjust Horz. Conv	R_HCONV
		G_HCONV
		B_HCONV
		R_REVHCONV
		G_REVHCONV
		B_REVHCONV
	Adjust Vert. Conv	R_VCONV
		G_VCONV
		B_VCONV
		R_REVVCONV
		G_REVVCONV
		B_REVVCONV
Version		Boot Code
		Config
		Sharp Table
		Rom Code
		GUI
		Sub CPU
SS		S4
		S5
Temp/Fan State	Temp	Inside Temp/ref
		Outside Temp/ref
	Fan Speed	Lamp Fan
		Other Fan
Option	Gamma Off	on/off
	Revise Color Uneven	on/off
	EEPROM Initialize	Cancel
		Initialize Start

FEHLERSUCHTABELLE



Überprüfen des Netzteils

Sind die Stecker CN751, P1707 und P3701 fest eingesteckt?
- NEIN → Sind die Stecker CN751, P1707 und P3701 fest eingesteckt?
- JA ↓

Ist die Lampenabdeckung fest geschlossen?
- NEIN → Die Lampenabdeckung fest schließen.
- JA ↓

Ist der Bimetall-Schalter ausgeschaltet?
- NEIN → Den Bimetall-Schalter ersetzen.
- JA ↓

Liegt zwischen Stift (1) und (3) von CN703 Wechselspannung (100-240 V) an?
- NEIN → F701 ersetzen.
- JA ↓

Den Stecker CN751 abziehen (EA). Liegt die Ausgangsspannung von 13 V an den Stiften (7), (8) und (9) an?
- NEIN → Q706, Q708 und Q710 auf Beschädigung überprüfen. Defekte Teile ersetzen.
- JA ↓

Die Ausgangsplatine auf Kurzschluß überprüfen. Ebenso UNT3701 an der Anschlußklemmen-Platine und die peripheren Schaltkreise überprüfen.

Überprüfung der Mikrocomputer-Peripherieschaltkreise

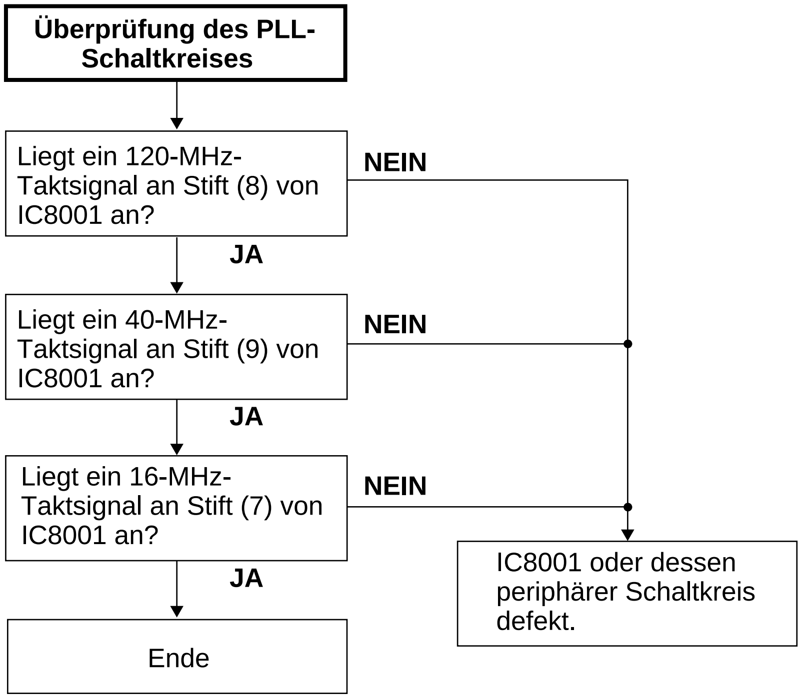
Liegt eine Spannung von ca. 3 V an Stift (33) (RCS) von IC1601 an?
- **NEIN** → Die Abdeckung des Einlaßfilters auf inkorrekte Einpassung sowie das Kühlgebläse auf Funktionsstörung überprüfen.
- **JA** ↓

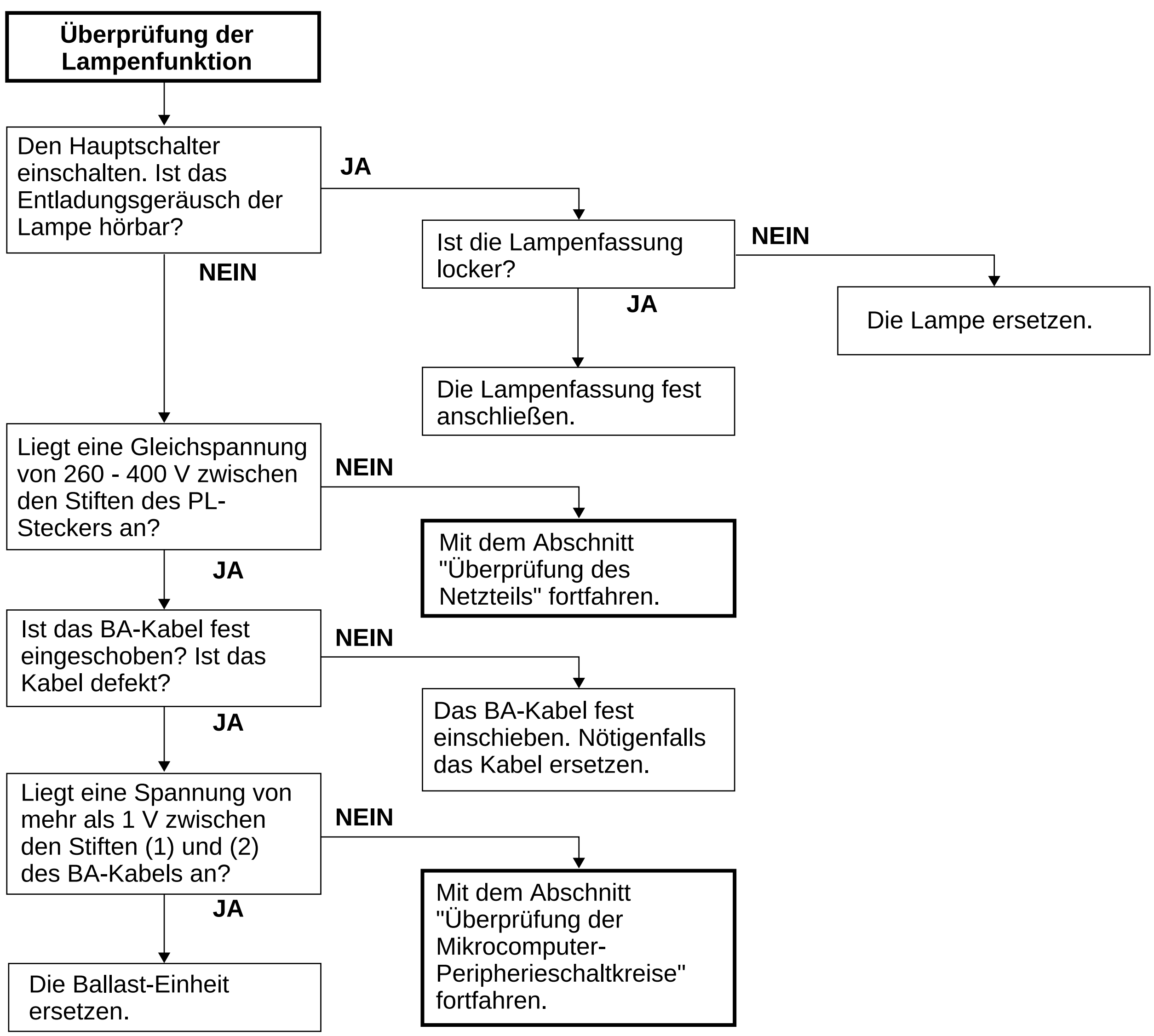
Ist SW1602 auf "NORMAL" gesetzt?
- **NEIN** → SW1602 auf die "NORMAL"-Position setzen.
- **JA** ↓

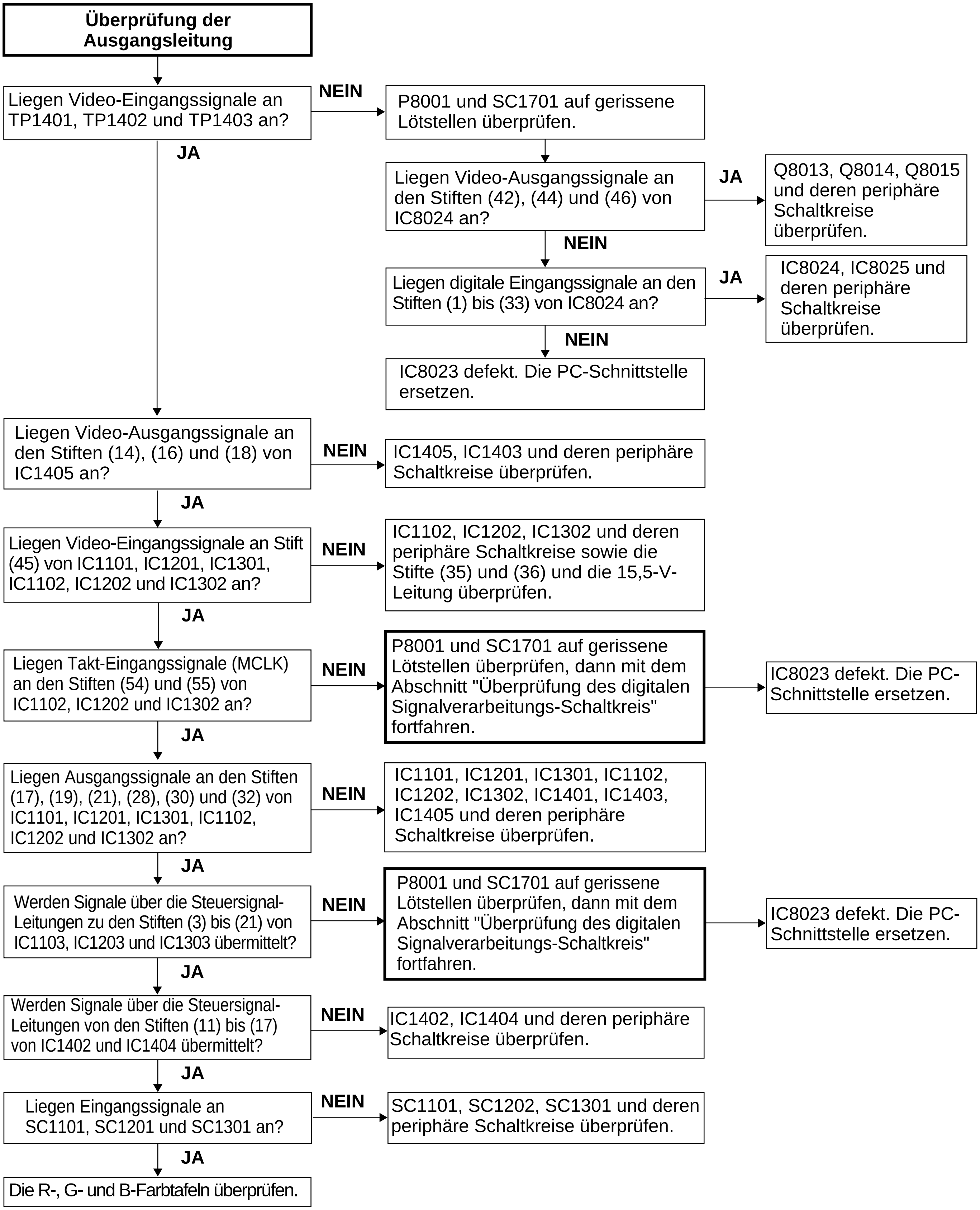
Liegt ein Impulssignal an Stift (64) von IC1601 an?
- **NEIN** → IC1601, IC1606 und die periphären Schaltkreise überprüfen.
- **JA** ↓

Liegt ein Impulssignal an Stift (1) von IC1601 an?
- **NEIN** → **Liegt der Signalpegel an Stift (7) von IC8037 bei ungefähr 0 V?**
  - **NEIN** → IC8018, IC8019, IC8020 und ihre periphären Schaltkreise sowie Stift (26) von IC1601 und dessen periphären Schaltkreise überprüfen.
  - **JA** → **Alle Signale (A1 bis A17 und D1 bis D15) von IC8021 mit einem Oszilloskop überprüfen. Liegen die Signalpegel bei 0 und 3 V?**
    - **NEIN** → IC8021 und IC8022 überprüfen. Nötigenfalls die PC-Schnittstelle ersetzen.
    - **JA** → Ende
- **JA** ↓

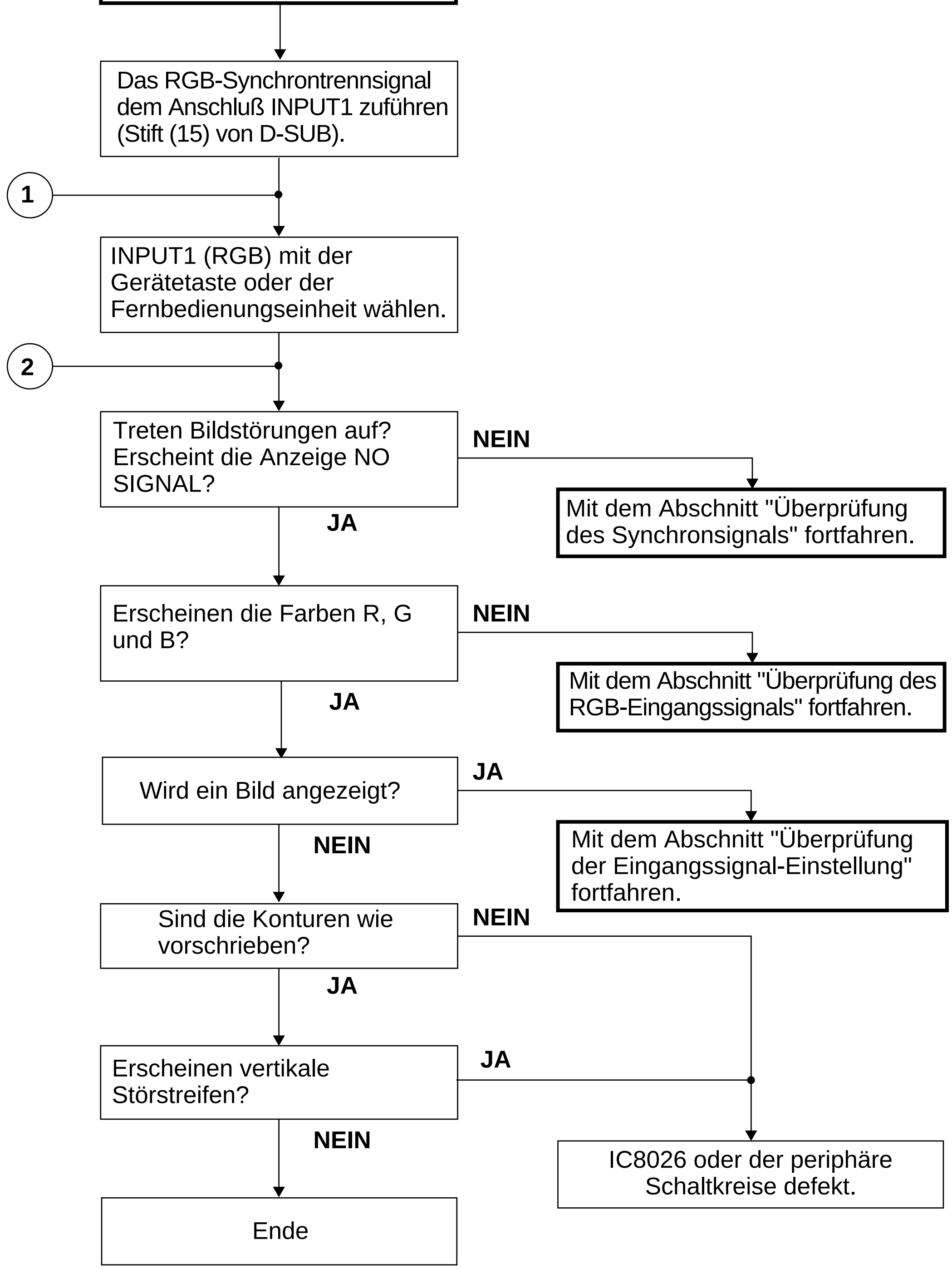
Liegt ein Signal an den Stiften (1), (3), (4) und (6) von IC1802 an?
- **NEIN** → Alle mit den Leitungen SDA3/SCL3 und SDA5/SCL5 verbundenen ICs überprüfen.
- **JA** → Ende

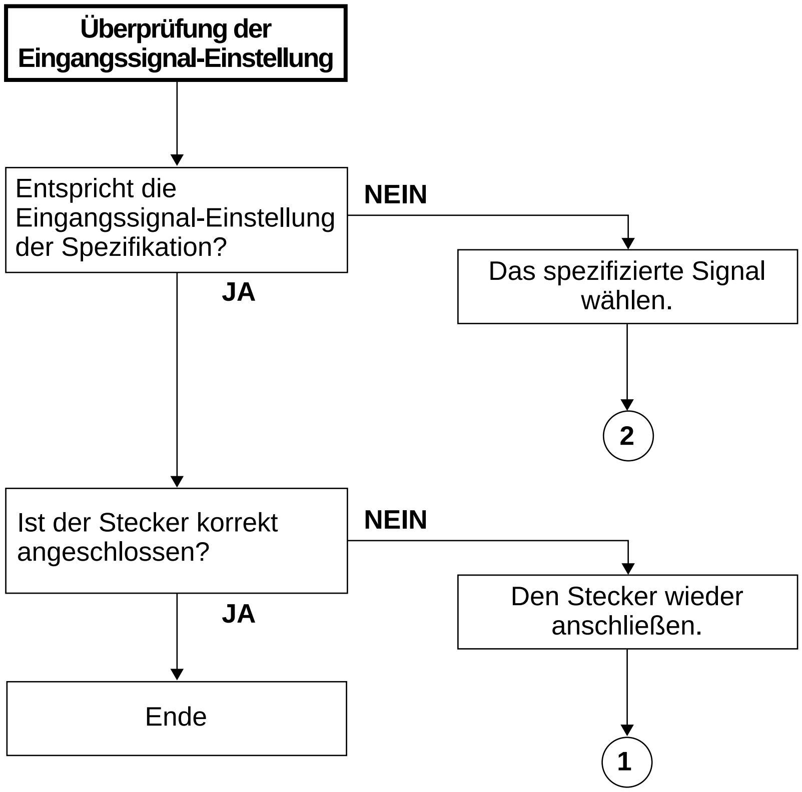

Überprüfung des PLL-Schaltkreises
Liegt ein 120-MHz-Taktsignal an Stift (8) von IC8001 an?
NEIN
JA
Liegt ein 40-MHz-Taktsignal an Stift (9) von IC8001 an?
NEIN
JA
Liegt ein 16-MHz-Taktsignal an Stift (7) von IC8001 an?
NEIN
JA
Ende
IC8001 oder dessen periphärer Schaltkreis defekt.

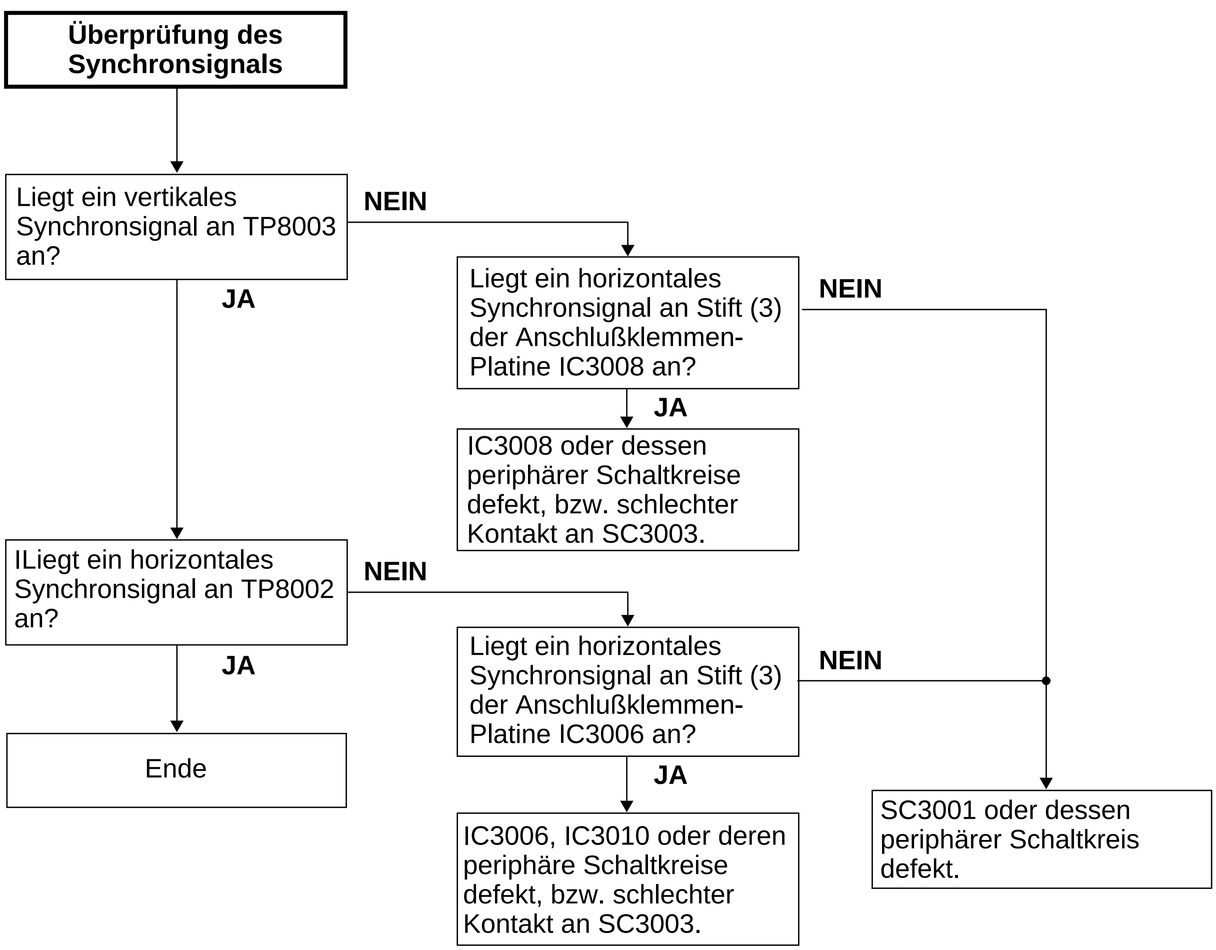

Überprüfung der Lampenfunktion
Den Hauptschalter einschalten. Ist das Entladungsgeräusch der Lampe hörbar?
JA
Ist die Lampenfassung locker?
NEIN
Die Lampe ersetzen.
JA
Die Lampenfassung fest anschließen.
NEIN
Liegt eine Gleichspannung von 260 - 400 V zwischen den Stiften des PL-Steckers an?
NEIN
Mit dem Abschnitt "Überprüfung des Netzteils" fortfahren.
JA
Ist das BA-Kabel fest eingeschoben? Ist das Kabel defekt?
NEIN
Das BA-Kabel fest einschieben. Nötigenfalls das Kabel ersetzen.
JA
Liegt eine Spannung von mehr als 1 V zwischen den Stiften (1) und (2) des BA-Kabels an?
NEIN
Mit dem Abschnitt "Überprüfung der Mikrocomputer-Peripherieschaltkreise" fortfahren.
JA
Die Ballast-Einheit ersetzen.


Überprüfung der Ausgangsleitung
Liegen Video-Eingangssignale an TP1401, TP1402 und TP1403 an?
NEIN
P8001 und SC1701 auf gerissene Lötstellen überprüfen.
Liegen Video-Ausgangssignale an den Stiften (42), (44) und (46) von IC8024 an?
JA
Q8013, Q8014, Q8015 und deren periphäre Schaltkreise überprüfen.
NEIN
Liegen digitale Eingangssignale an den Stiften (1) bis (33) von IC8024 an?
JA
IC8024, IC8025 und deren periphäre Schaltkreise überprüfen.
NEIN
IC8023 defekt. Die PC-Schnittstelle ersetzen.
JA
Liegen Video-Ausgangssignale an den Stiften (14), (16) und (18) von IC1405 an?
NEIN
IC1405, IC1403 und deren periphäre Schaltkreise überprüfen.
JA
Liegen Video-Eingangssignale an Stift (45) von IC1101, IC1201, IC1301, IC1102, IC1202 und IC1302 an?
NEIN
IC1102, IC1202, IC1302 und deren periphäre Schaltkreise sowie die Stifte (35) und (36) und die 15,5-V-Leitung überprüfen.
JA
Liegen Takt-Eingangssignale (MCLK) an den Stiften (54) und (55) von IC1102, IC1202 und IC1302 an?
NEIN
P8001 und SC1701 auf gerissene Lötstellen überprüfen, dann mit dem Abschnitt "Überprüfung des digitalen Signalverarbeitungs-Schaltkreis" fortfahren.
IC8023 defekt. Die PC-Schnittstelle ersetzen.
JA
Liegen Ausgangssignale an den Stiften (17), (19), (21), (28), (30) und (32) von IC1101, IC1201, IC1301, IC1102, IC1202 und IC1302 an?
NEIN
IC1101, IC1201, IC1301, IC1102, IC1202, IC1302, IC1401, IC1403, IC1405 und deren periphäre Schaltkreise überprüfen.
JA
Werden Signale über die Steuersignal-Leitungen zu den Stiften (3) bis (21) von IC1103, IC1203 und IC1303 übermittelt?
NEIN
P8001 und SC1701 auf gerissene Lötstellen überprüfen, dann mit dem Abschnitt "Überprüfung des digitalen Signalverarbeitungs-Schaltkreis" fortfahren.
IC8023 defekt. Die PC-Schnittstelle ersetzen.
JA
Werden Signale über die Steuersignal-Leitungen von den Stiften (11) bis (17) von IC1402 und IC1404 übermittelt?
NEIN
IC1402, IC1404 und deren periphäre Schaltkreise überprüfen.
JA
Liegen Eingangssignale an SC1101, SC1201 und SC1301 an?
NEIN
SC1101, SC1202, SC1301 und deren periphäre Schaltkreise überprüfen.
JA
Die R-, G- und B-Farbtafeln überprüfen.

Überprüfung des RGB-Eingangssignals




Überprüfung der Eingangssignal-Einstellung
Entspricht die Eingangssignal-Einstellung der Spezifikation?
NEIN
Das spezifizierte Signal wählen.
2
JA
Ist der Stecker korrekt angeschlossen?
NEIN
Den Stecker wieder anschließen.
1
JA
Ende


Überprüfung des Synchronsignals
Liegt ein vertikales Synchronsignal an TP8003 an?
NEIN
Liegt ein horizontales Synchronsignal an Stift (3) der Anschlußklemmen-Platine IC3008 an?
NEIN
JA
IC3008 oder dessen periphärer Schaltkreise defekt, bzw. schlechter Kontakt an SC3003.
JA
ILiegt ein horizontales Synchronsignal an TP8002 an?
NEIN
Liegt ein horizontales Synchronsignal an Stift (3) der Anschlußklemmen-Platine IC3006 an?
NEIN
JA
IC3006, IC3010 oder deren periphäre Schaltkreise defekt, bzw. schlechter Kontakt an SC3003.
SC3001 oder dessen periphärer Schaltkreis defekt.
JA
Ende

Überprüfung des RGB-Signals

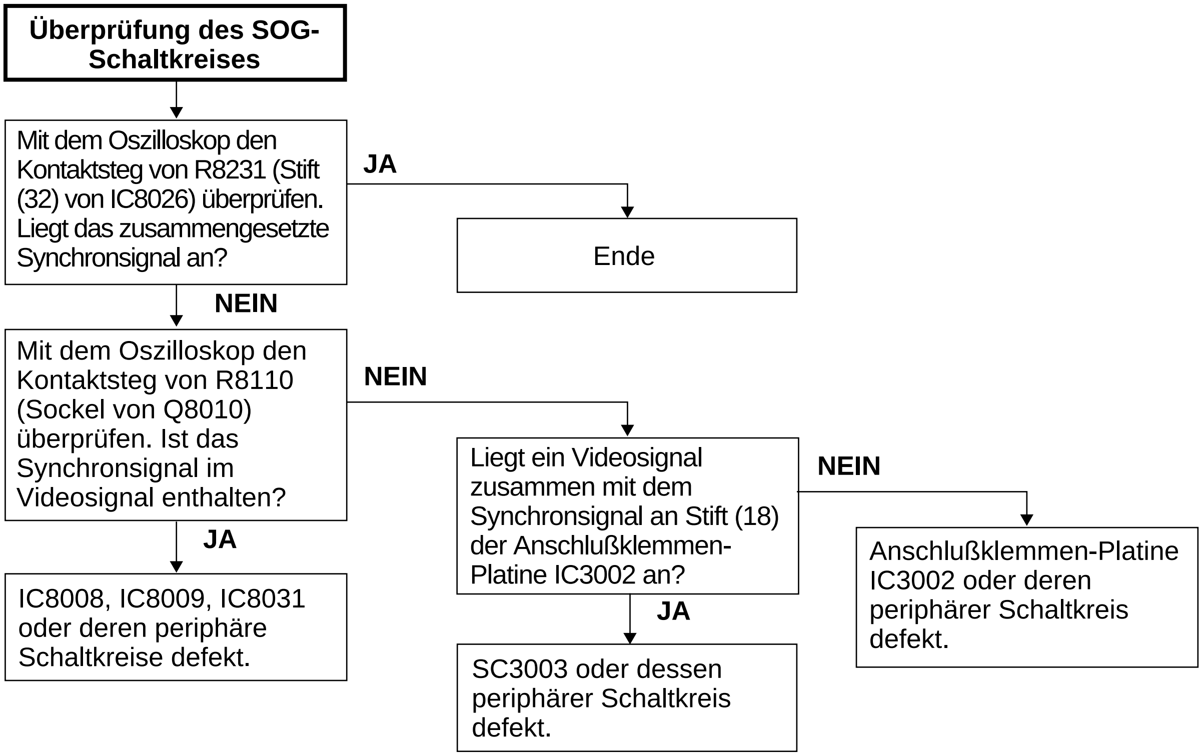
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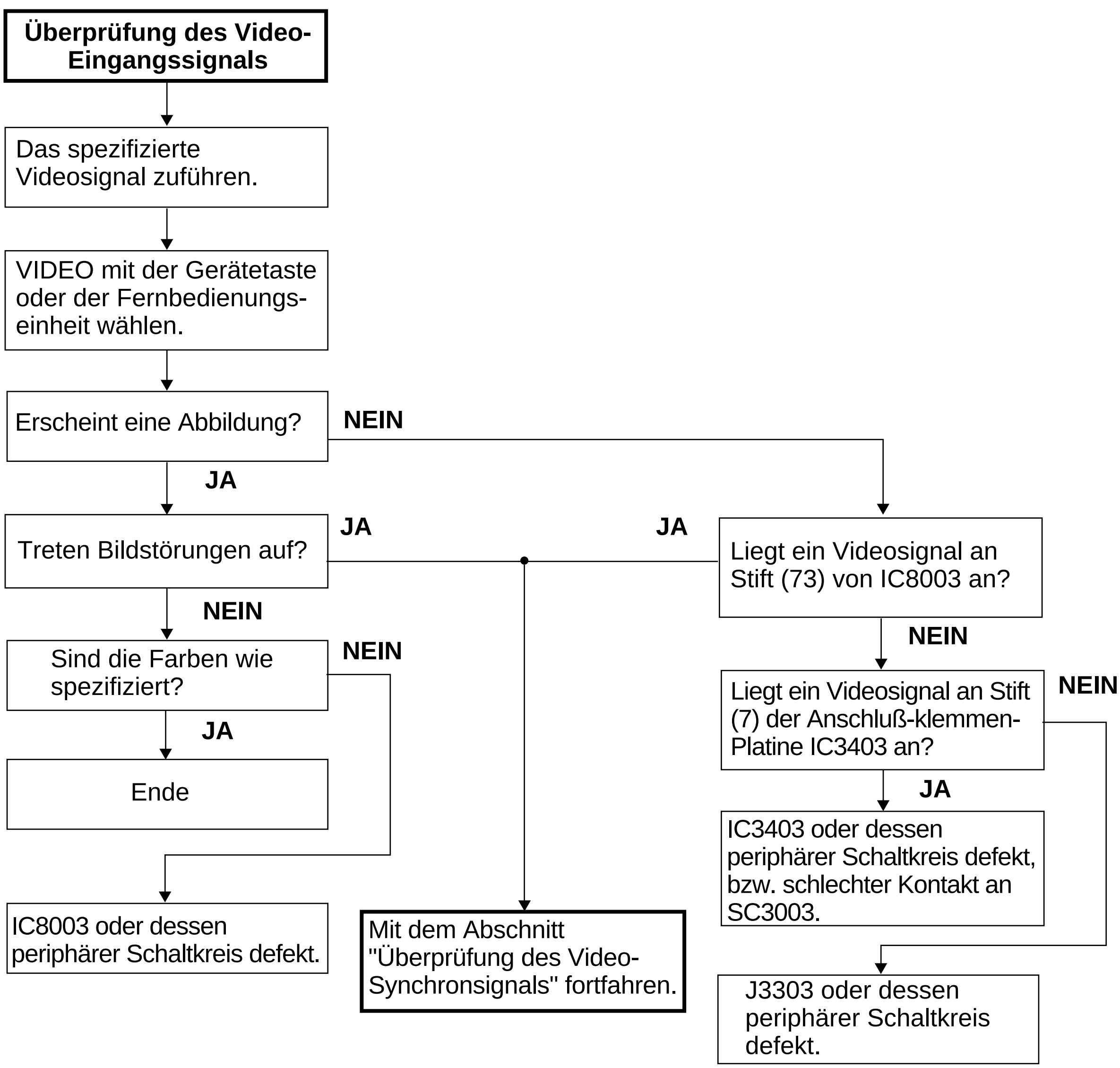
Um das Eingangssignal überprüfen zu können, muß der Signalgenerator auf das Farbabstufungssignal eingestellt werden.

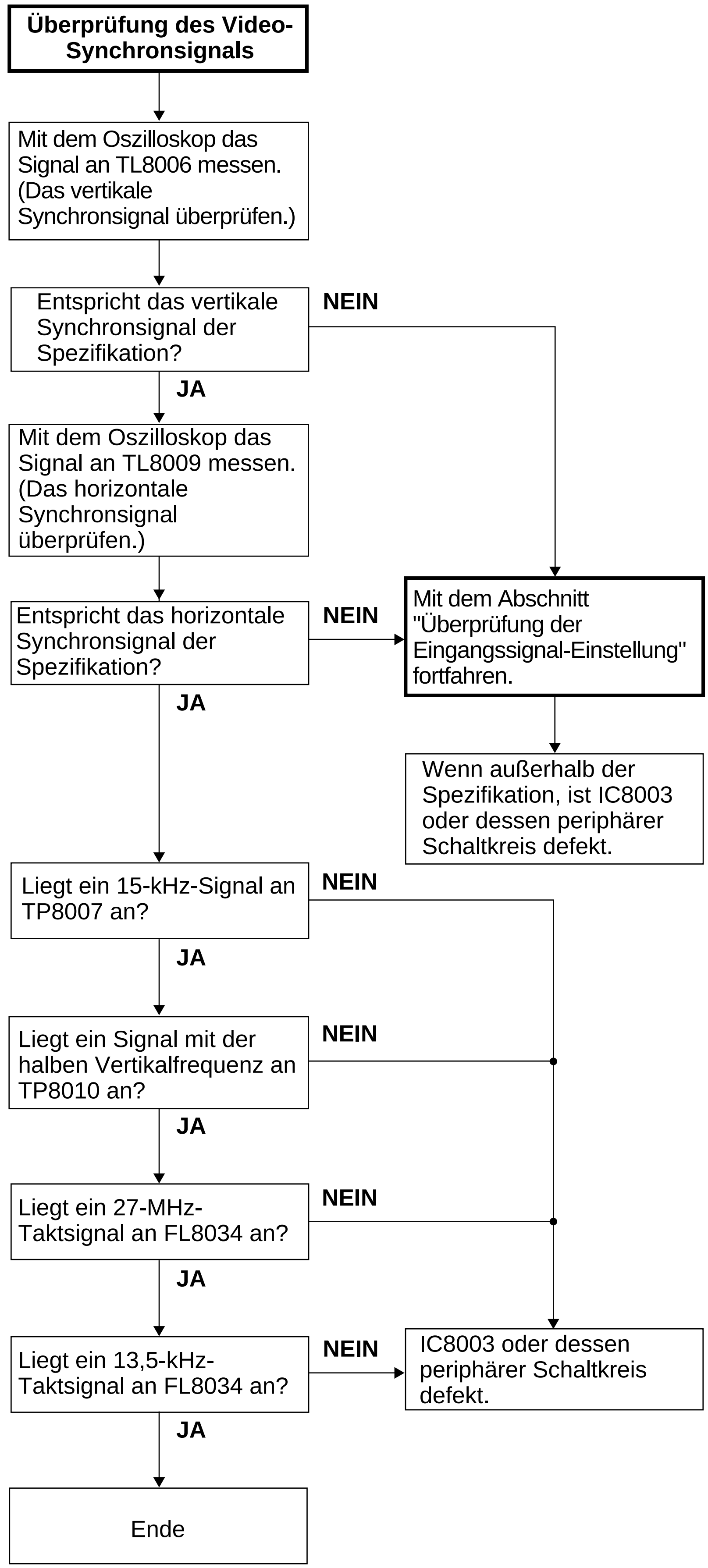
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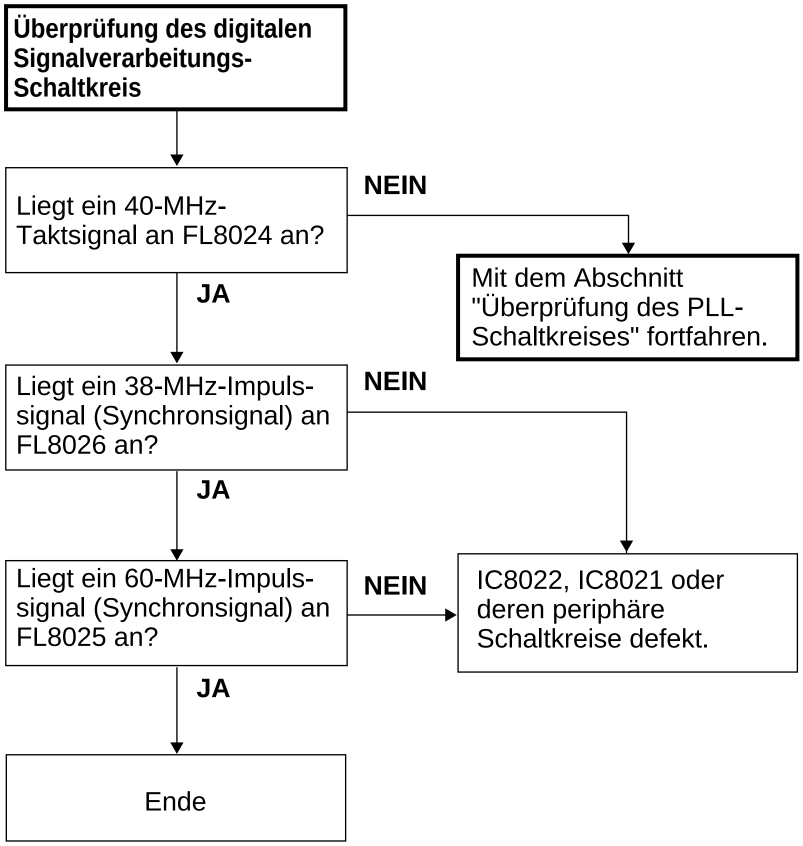
Mit dem Oszilloskop die Kontaktstege (R-, G- und B-Eingangssignale an IC8026) von C8204, C8208 und C8213 überprüfen. Liegt das spezifizierte Farbabstufungssignal an?

- **JA** → IC8026 oder dessen peripährer Schaltkreis defekt.
- **NEIN** → Liegen Farbabstufungssignale an den Stiften (8), (10) und (12) von IC8012 an?
  - **JA** → IC8012 oder dessen peripährer Schaltkreis defekt.
  - **NEIN** → Liegen Farbabstufungssignale an den Stiften (16), (18) und (20) der Anschlußklemmen-Platine IC3002 an?
    - **JA** → IC3002 oder dessen peripährer Schaltkreis defekt, bzw. schlechter Kontakt an SC3003.
    - **NEIN** → SC3001 oder dessen peripährer Schaltkreis defekt.


Überprüfung des SOG-Schaltkreises
Mit dem Oszilloskop den Kontaktsteg von R8231 (Stift (32) von IC8026) überprüfen. Liegt das zusammengesetzte Synchronsignal an?
JA
Ende
NEIN
Mit dem Oszilloskop den Kontaktsteg von R8110 (Sockel von Q8010) überprüfen. Ist das Synchronsignal im Videosignal enthalten?
NEIN
Liegt ein Videosignal zusammen mit dem Synchronsignal an Stift (18) der Anschlußklemmen-Platine IC3002 an?
NEIN
Anschlußklemmen-Platine IC3002 oder deren peripharer Schaltkreis defekt.
JA
SC3003 oder dessen peripharer Schaltkreis defekt.
JA
IC8008, IC8009, IC8031 oder deren periphäre Schaltkreise defekt.


Überprüfung des Video-Eingangssignals
Das spezifizierte Videosignal zuführen.
VIDEO mit der Gerätetaste oder der Fernbedienungs-einheit wählen.
Erscheint eine Abbildung?
NEIN
JA
Treten Bildstörungen auf?
JA
JA
Liegt ein Videosignal an Stift (73) von IC8003 an?
NEIN
Liegt ein Videosignal an Stift (7) der Anschluß-klemmen-Platine IC3403 an?
NEIN
JA
IC3403 oder dessen peripharer Schaltkreis defekt, bzw. schlechter Kontakt an SC3003.
J3303 oder dessen peripharer Schaltkreis defekt.
NEIN
Sind die Farben wie spezifiziert?
NEIN
JA
Ende
IC8003 oder dessen peripharer Schaltkreis defekt.
Mit dem Abschnitt "Überprüfung des Video-Synchronsignals" fortfahren.


Überprüfung des Video-Synchronsignals
Mit dem Oszilloskop das Signal an TL8006 messen. (Das vertikale Synchronsignal überprüfen.)
Entspricht das vertikale Synchronsignal der Spezifikation?
NEIN
JA
Mit dem Oszilloskop das Signal an TL8009 messen. (Das horizontale Synchronsignal überprüfen.)
Entspricht das horizontale Synchronsignal der Spezifikation?
NEIN
JA
Mit dem Abschnitt "Überprüfung der Eingangssignal-Einstellung" fortfahren.
Wenn außerhalb der Spezifikation, ist IC8003 oder dessen peripherer Schaltkreis defekt.
Liegt ein 15-kHz-Signal an TP8007 an?
NEIN
JA
Liegt ein Signal mit der halben Vertikalfrequenz an TP8010 an?
NEIN
JA
Liegt ein 27-MHz-Taktsignal an FL8034 an?
NEIN
JA
Liegt ein 13,5-kHz-Taktsignal an FL8034 an?
NEIN
JA
IC8003 oder dessen peripherer Schaltkreis defekt.
Ende


Überprüfung des digitalen Signalverarbeitungs-Schaltkreis
Liegt ein 40-MHz-Taktsignal an FL8024 an?
NEIN
Mit dem Abschnitt "Überprüfung des PLL-Schaltkreises" fortfahren.
JA
Liegt ein 38-MHz-Impuls-signal (Synchronsignal) an FL8026 an?
NEIN
JA
Liegt ein 60-MHz-Impuls-signal (Synchronsignal) an FL8025 an?
NEIN
IC8022, IC8021 oder deren periphäre Schaltkreise defekt.
JA
Ende

Überprüfung des Audiosignals

Liegen Audio-Audiosignale an den Stiften (7) von IC3301 und IC3302 an?

- NEIN: Das Audiokabel berpr fen. IC3301 und IC3302 miteinander vertauschen, um die periph ren Schaltkreise zu berpr fen.
- JA:

Liegt Spannung an Stift (4) von IC1901 an?

- NEIN: Zuerst R1914, dann den Leistungsschaltkreis berpr fen.
- JA:

Mit der Fernbedienungs- einheit VOL ver ndern und MUTE deaktivieren.
Ver ndert sich die an Stift (7) von IC1901 anliegende Spannung dementsprechend?

- NEIN: IC1403, IC1605 und deren periph re Schaltkreise berpr fen.
- JA:

Liegt das Audio- Ausgangssignal an Stift (5) von IC1901 an?

- NEIN: IC1901 und dessen periph rer Schaltkreis berpr fen.
- JA:

Den SP-Stecker berpr fen.

Überprüfung der RS-232C-Schnittstelle

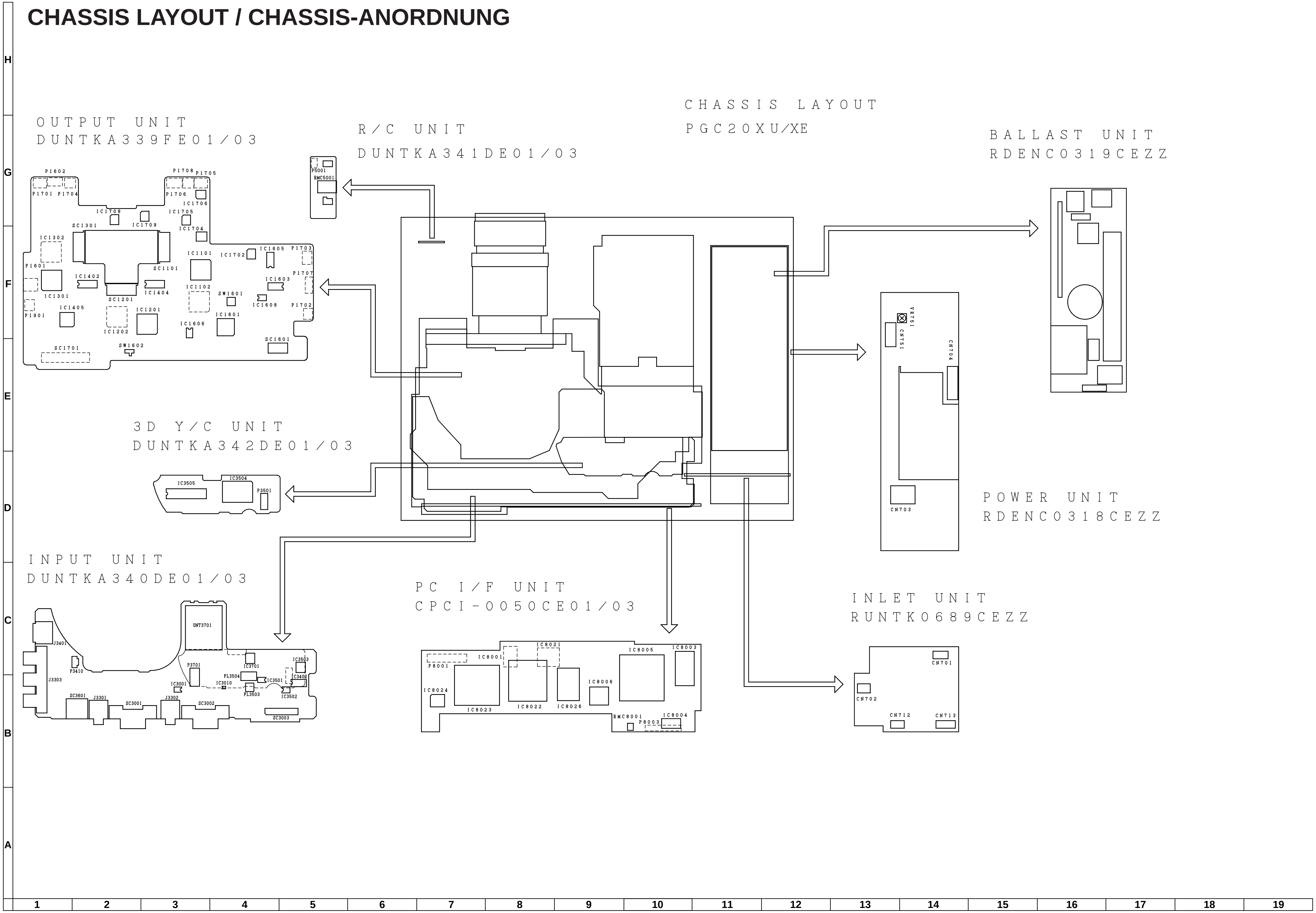
Mit Hilfe der Kommunikations-Software (Empfohlen: "TERA TERM"), die folgenden Einstellungen durchf hren:
Baud-Geschwindigkeit: 9600 bps
Bit-L nge: 8 Bits
Stopp-Bit: 1 Bit
Parit t: Keine
Die RETURN-Taste an der Tastatur dr cken.
Erscheint "ERR" erneut?

- NEIN: IC3601, IC1606, IC1601, SW1602, IC8022, den Kommunikations- Schaltkreis und deren periph re Schaltkreise berpr fen.
- JA:

Ende

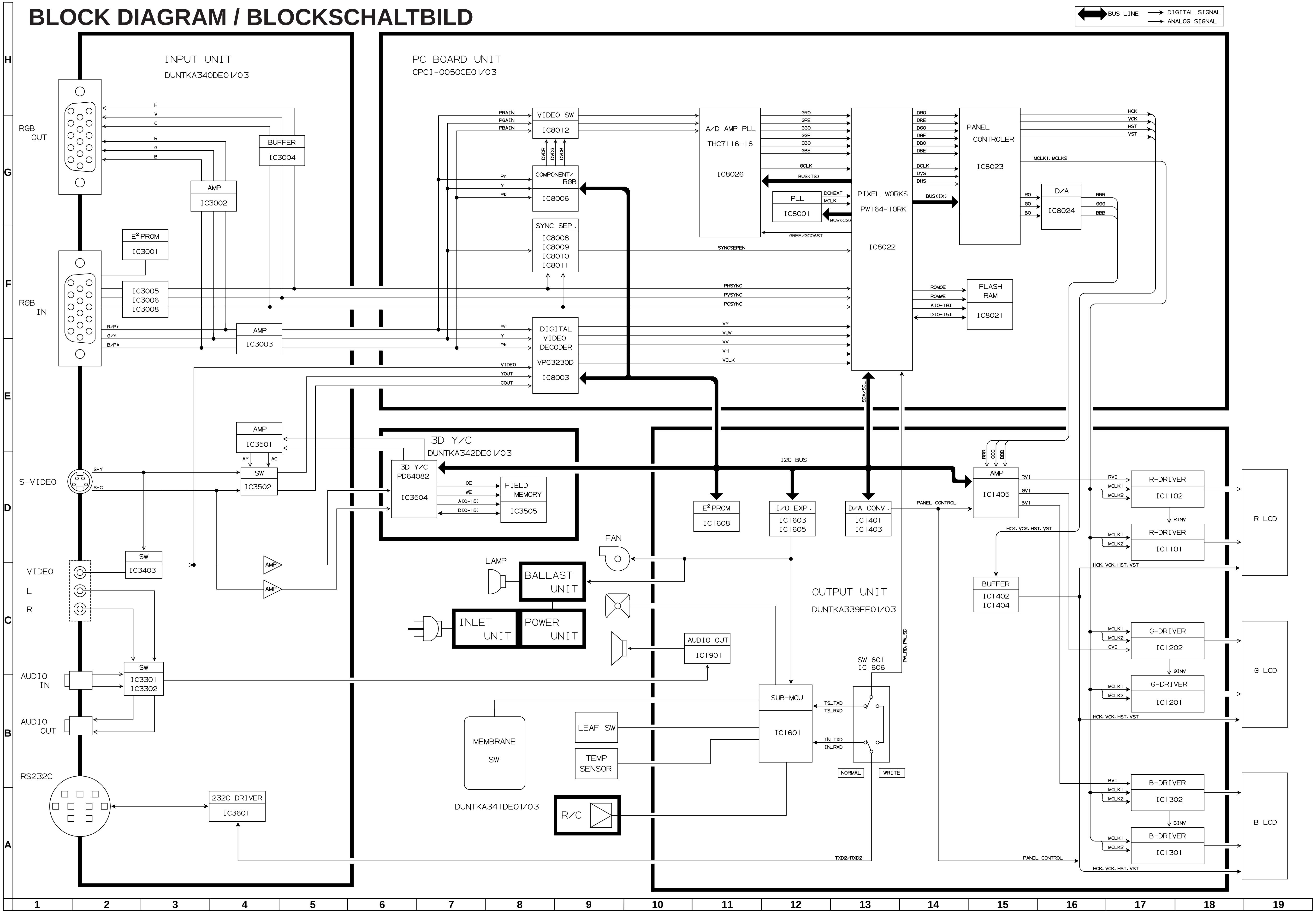
PG-C20XU
PG-C20XE
AN-Z7T

CHASSIS LAYOUT / CHASSIS-ANORDNUNG



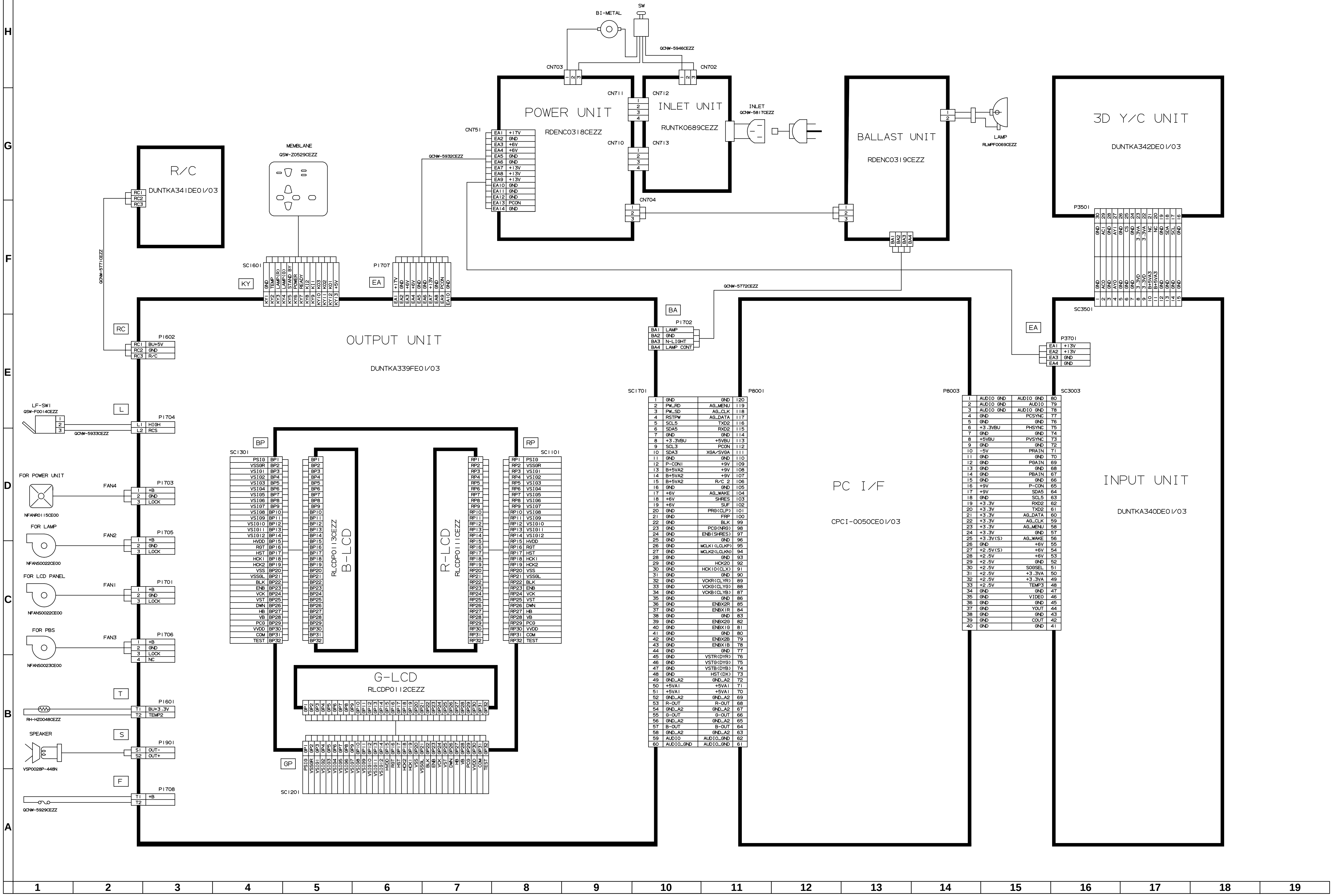
PG-C20XU
PG-C20XE
AN-Z7T

BLOCK DIAGRAM / BLOCKSCHALTBILD



PG-C20XU
PG-C20XE
AN-Z7T

OVERALL WIRING DIAGRAM / GESAMTSCHALTPLAN



DESCRIPTION OF SCHEMATIC DIAGRAM

VOLTAGE MEASUREMENT CONDITION:

1. Voltages at test points are measured at the supply voltage of AC 220V. Signals are fed by a color bar signal generator for servicing purpose and the above voltages are measured with a 20k ohm/V tester.

WAVEFORM MEASUREMENT CONDITION:

1. Waveforms at test points are observed at the supply voltage of AC 220V. Signals are fed by a color bar signal generator for servicing purpose.

INDICATION OF RESISTOR & CAPACITOR:

RESISTOR

1. The unit of resistance "Ω" is omitted. (K=kΩ=1000 Ω, M=MΩ).
2. All resistors are ± 5%, unless otherwise noted. (J= ± 5%, F= ± 1%, D= ± 0.5%)
3. All resistors are 1/10W, unless otherwise noted.
4. All resistors are Carbon type, unless otherwise noted.
   Ⓒ: Solid　Ⓦ: Cement
   Ⓢ: Oxide Film　Ⓣ: Special
   Ⓝ: Metal Coating

CAPACITOR

1. All capacitors are µF, unless otherwise noted. (P=pF=µµF).
2. All capacitors are 50V, unless otherwise noted.
3. All capacitors are Ceramic type, unless otherwise noted.
   (ML): Mylar　(TA): Tantalum
   (PF): Polypro Film　(ST): Styrol

CAUTION:
This circuit diagram is original one, therefore there may be a slight difference from yours.

SAFETY NOTES:

1. ***DISCONNECT THE AC PLUG FROM THE AC OUTLET BEFORE REPLACEING PARTS.***
2. ***SEMICONDUCTOR HEAT SINKS SHOULD BE REGARDED AS POTENTIAL SHOCK HAZARDS WHEN THE CHASSIS IS OPERATING.***

IMPORTANT SAFETY NOTICE:

PARTS MARKED WITH "⚠" ( ) ARE IMPORTANT FOR MAINTAINING THE SAFETY OF THE SET. BE SURE TO REPLACE THESE PARTS WITH SPECIFIED ONES FOR MAINTAINING THE SAFETY AND PERFORMANCE OF THE SET.

BESCHREIBUNG DES SCHEMATISCHEN SCHALTPLANS

SPANNUNGSMESSUNGEN:

1. Spannungen an den Prüfpunkten werden bei einer Netzspannung von 220V gemessen, Signale werden für die Wartung mit einem Farbbalken-Signal generator zugeführt, und Spannungen werden mit einem Meßinstrument (20 kΩ/V) ermittelt.

SIGNALFORMMESSUNGEN:

1. Die Wellenformen an den Testpunkten werden bei einer Netzspannung von 220V verfolgt. Signale werden für die Wartung mit einem Farbbalken-Signal generator zugeführt.

BEZEICHNUNG DES WIDERSTANDS UND KONDENSATORS:

WIDERSTAND

1. Die Widerstandseinheit "Ω" wird weggelassen. (K=kΩ=1000 Ω, M=MΩ)
2. Alle Widerstände haben ± 5%, sofern nicht anders angegeben.(J= ± 5%, F= ± 1%, D= ± 0.5%)
3. Alle Widerstände haben 1/10W, sofern nicht anders angegeben.
4. Alle Widerstände sind Kohletyp, sofern nicht anders angegeben.
   Ⓒ: Solid　Ⓦ: Cement
   Ⓢ: Oxide Film　Ⓣ: Special
   Ⓝ: Metal Coating

KONDENSATOR

1. Die Kapazitätseinheit ist µF, sofern nicht anders angegeben. (P=pF=µµF).
2. Alle Kondensatoren haben 50V, sofern nicht anders angegeben.
3. Alle Kondensatoren sind Keramiktyp, sofern nicht anders angegeben.
   (ML): Mylar　(TA): Tantal
   (PF): Polyprofilm　(ST): Styrol

ACHTUNG:
Bei diesem Schaltplan handelt es sich um den ursprünglichen. Esönnen daher geringfügige Unterschiede zu dem Ihrem bestehen.

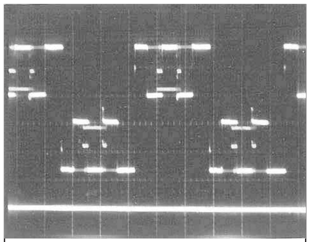
SICHERHEITSANMERKUNGEN:

1. ***VOR DEM AUSWECHSELN VON TEILEN MUSS UNBEDINGT NETZSTECKER AUS DER NETZSTECKDOSE GEZOGEN WERDEN.***
2. ***DIE WARMEABLEITER DER HALBLEITER SOLLTEN BEIM BETRIEB DES CHASSIS ALS MÖGLICHE URSACHEN VON GEFÄHRLICHEN ELEKTRISCHEN SCHLÄGEN BETRACHTET WERDEN.***

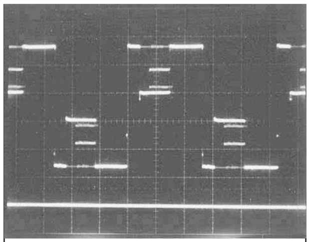
WICHTIGE SICHERHEITSANMERKUNGEN:

MIT "⚠"( )BEZEICHNETEN TEILE SIND BESONDERS WICHTIG FÜR DIE AUFRECHTERHALTUNG DER SICHERHEIT . BEIM WECHDIESER TEILE SOLLTEN DIE VORGESCHRIEBENEN TEILE IMMER VERWENDET WERDEN, UM SOWOHL DIE SICHERHEIT ALS AUCH DIE LEISTUNG DES GERÄTES AUFRECHTZUERHALTEN.

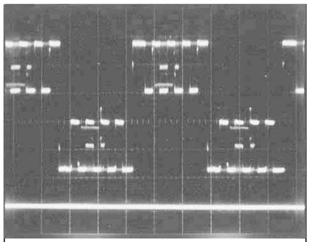
WAVEFORMS / WELLENFORMEN



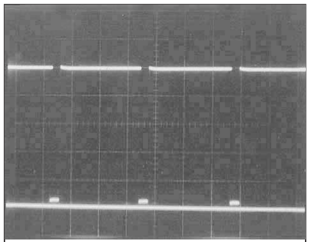
① TP1101
(RSIG1)
H : 10μ sec/div
V : 2V/div



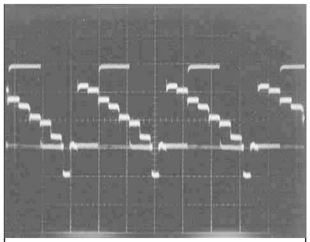
② TP1201
(GSIG1)
H : 10μ sec/div
V : 2V/div



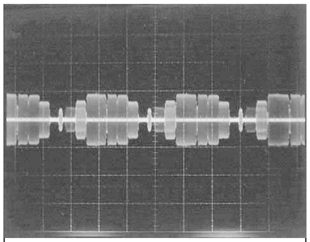
③ TP1301
(BSIG1)
H : 10μ sec/div
V : 2V/div



④ IC8003(55)pin (TL8009)
(H-OUT)
H : 20μ sec/div
V : 1V/div



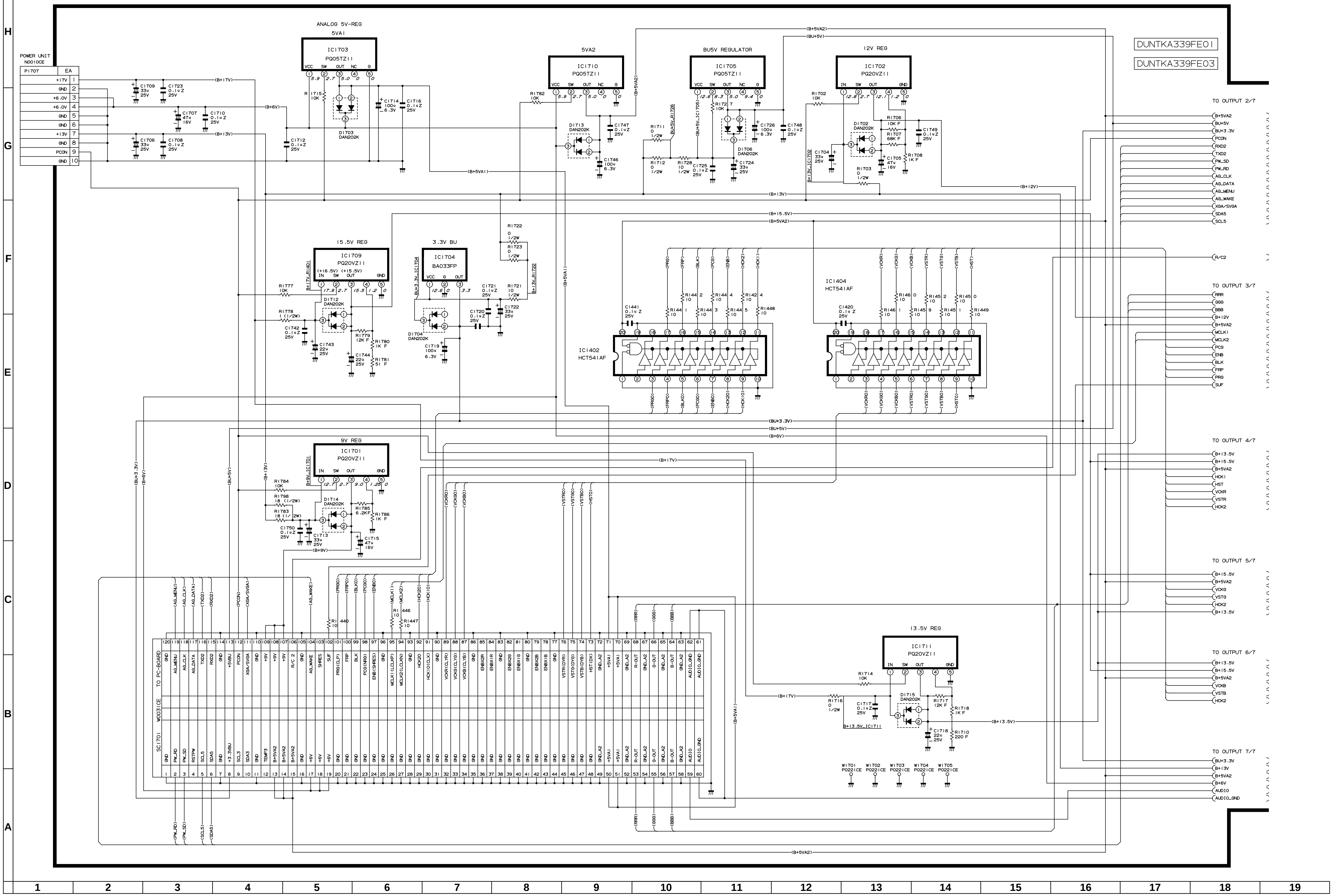
⑤ IC8003 (72)pin
(Y-signal)
H : 10μ sec/div
V : 0.2V/div



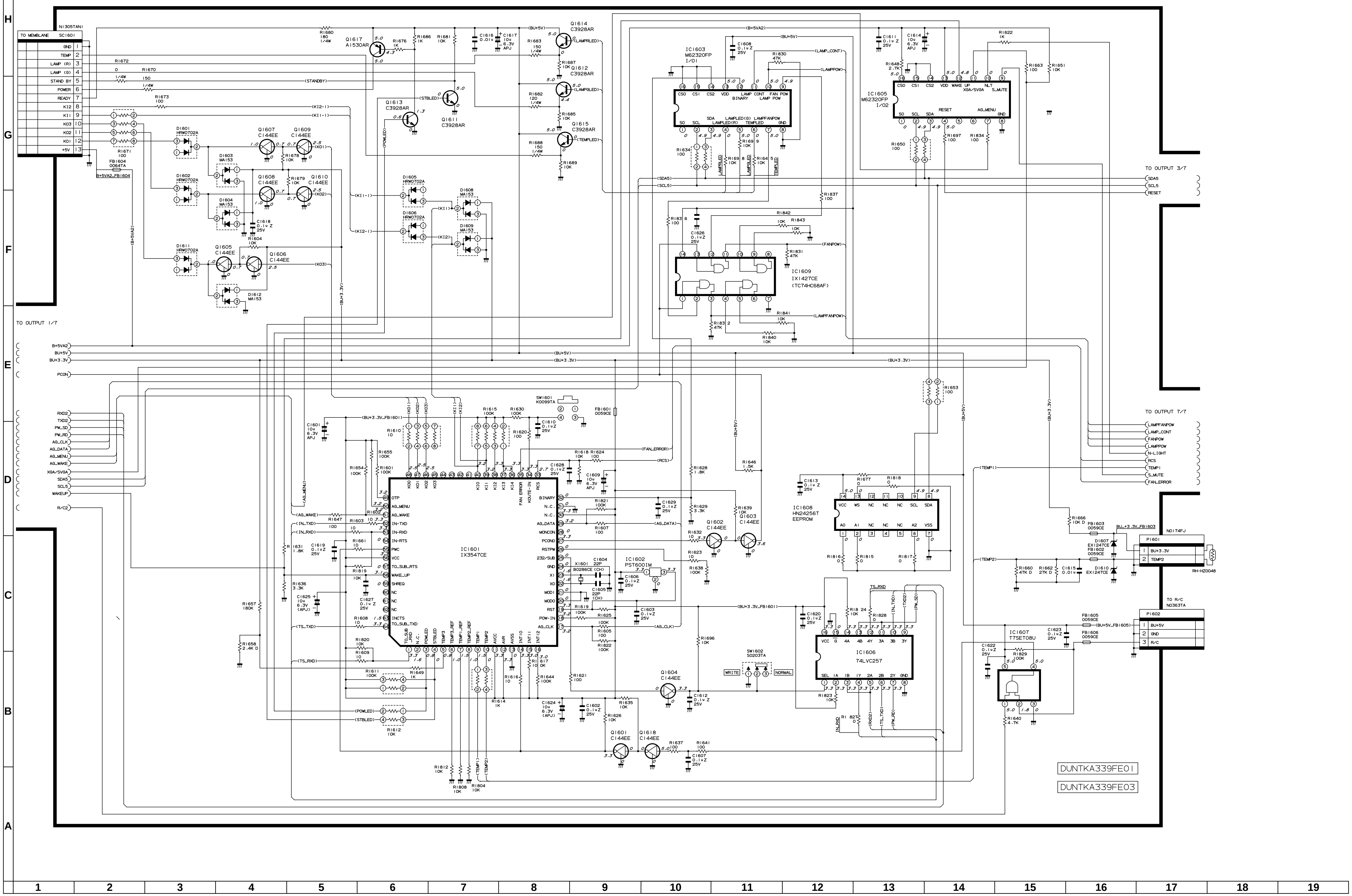
⑥ IC8003 (71)pin
(CHROMA signal)
H : 10μ sec/div
V : 0.2V/div

PG-C20XU
PG-C20XE
AN-Z7T

■ OUTPUT UNIT / AUSGABEEINHEIT-1/7

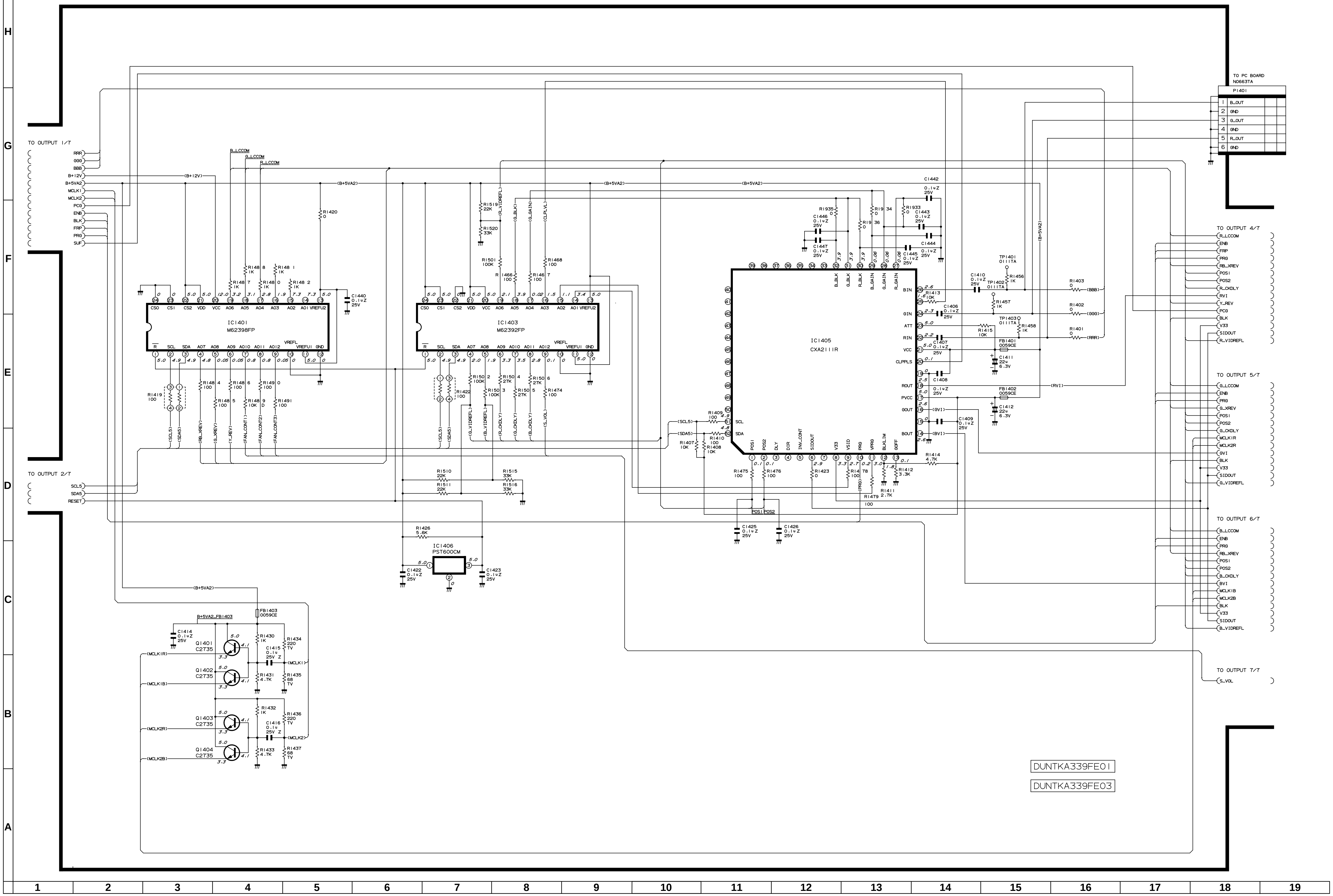


■ OUTPUT UNIT / AUSGABEEINHEIT-2/7



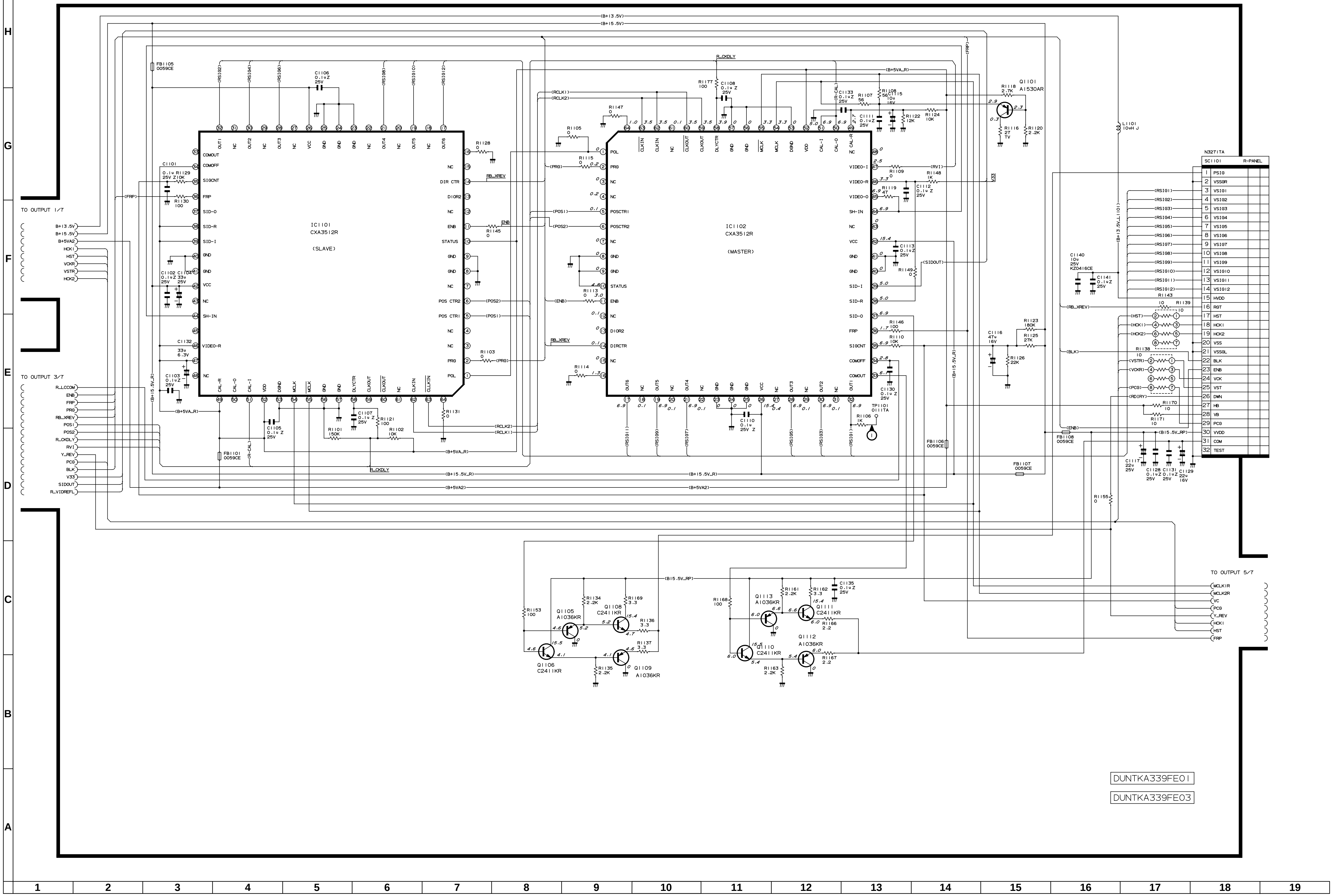
PG-C20XU
PG-C20XE
AN-Z7T

■ OUTPUT UNIT / AUSGABEEINHEIT-3/7



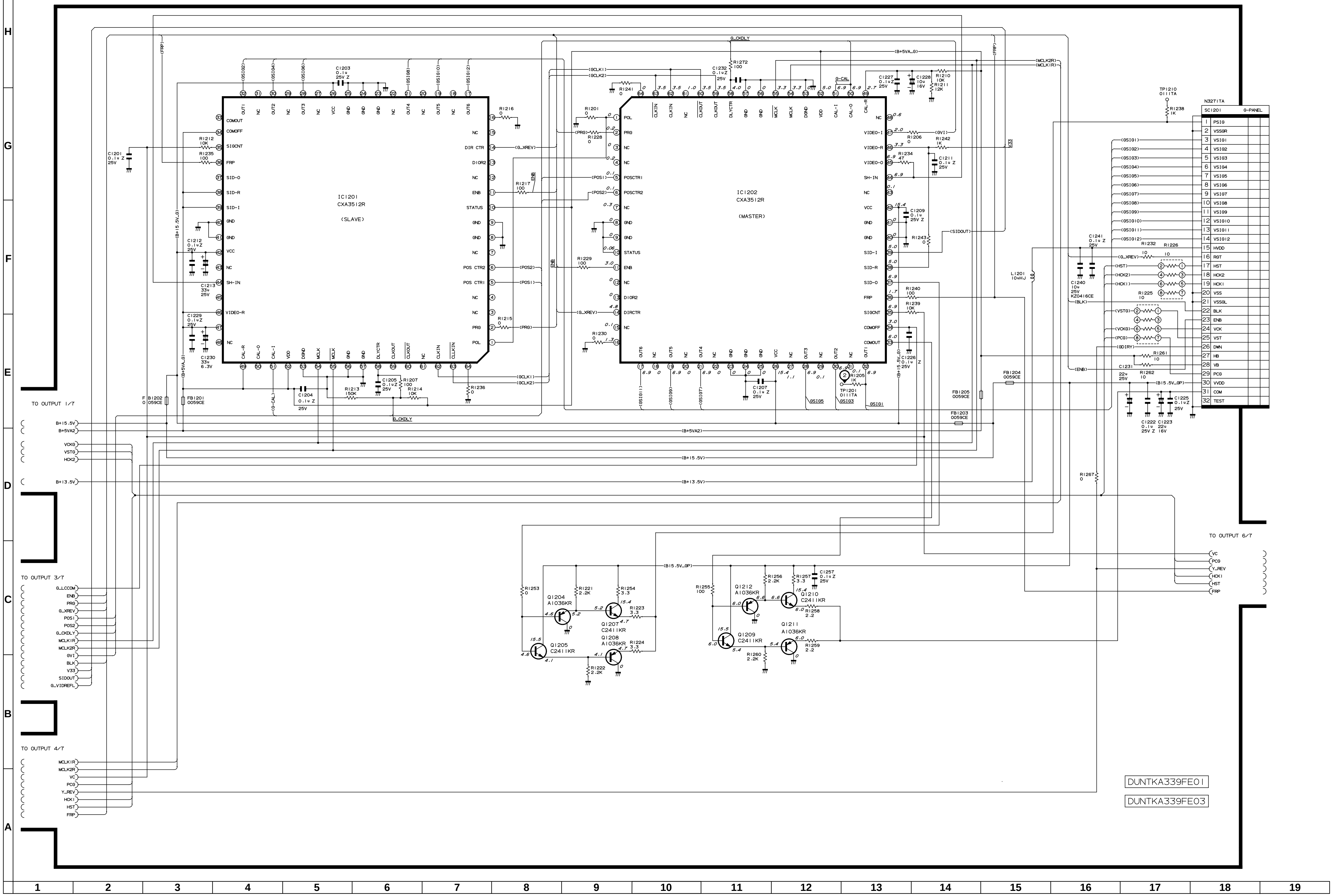
PG-C20XU
PG-C20XE
AN-Z7T

■ OUTPUT UNIT / AUSGABEEINHEIT-4/7



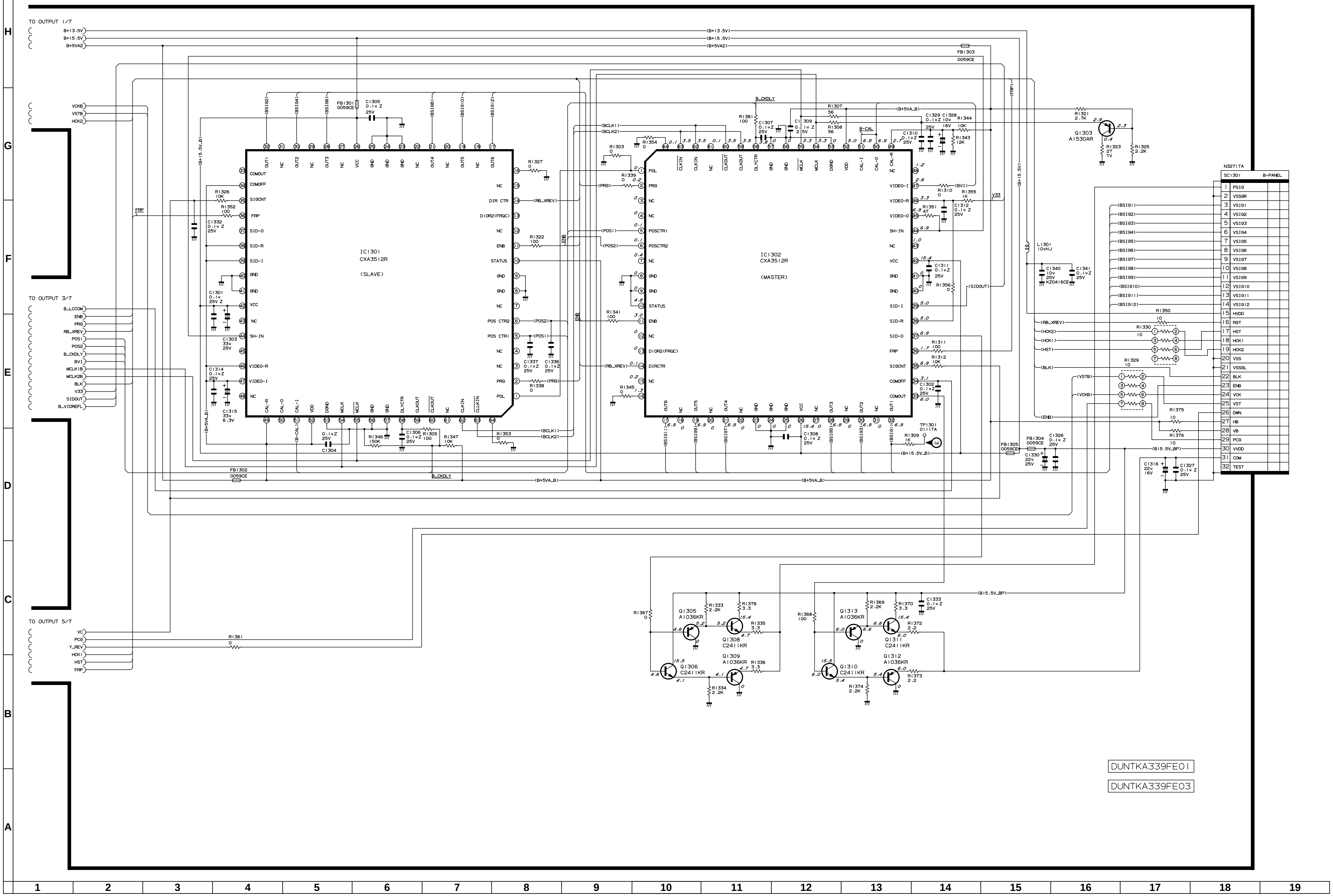
PG-C20XU
PG-C20XE
AN-Z7T

■ OUTPUT UNIT / AUSGABEEINHEIT-5/7



PG-C20XU
PG-C20XE
AN-Z7T

■ OUTPUT UNIT / AUSGABEEINHEIT-6/7

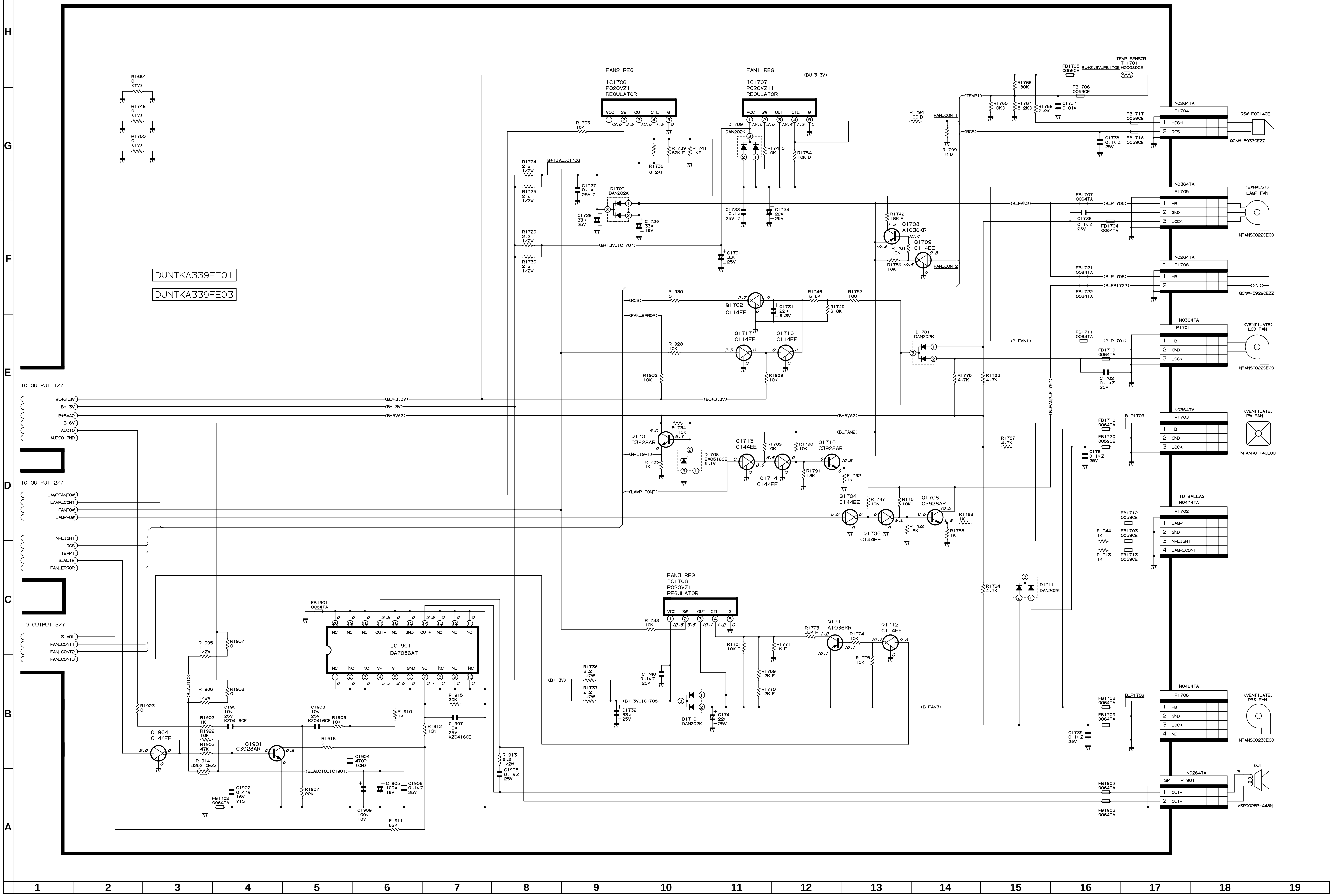


DUNTKA339FE01

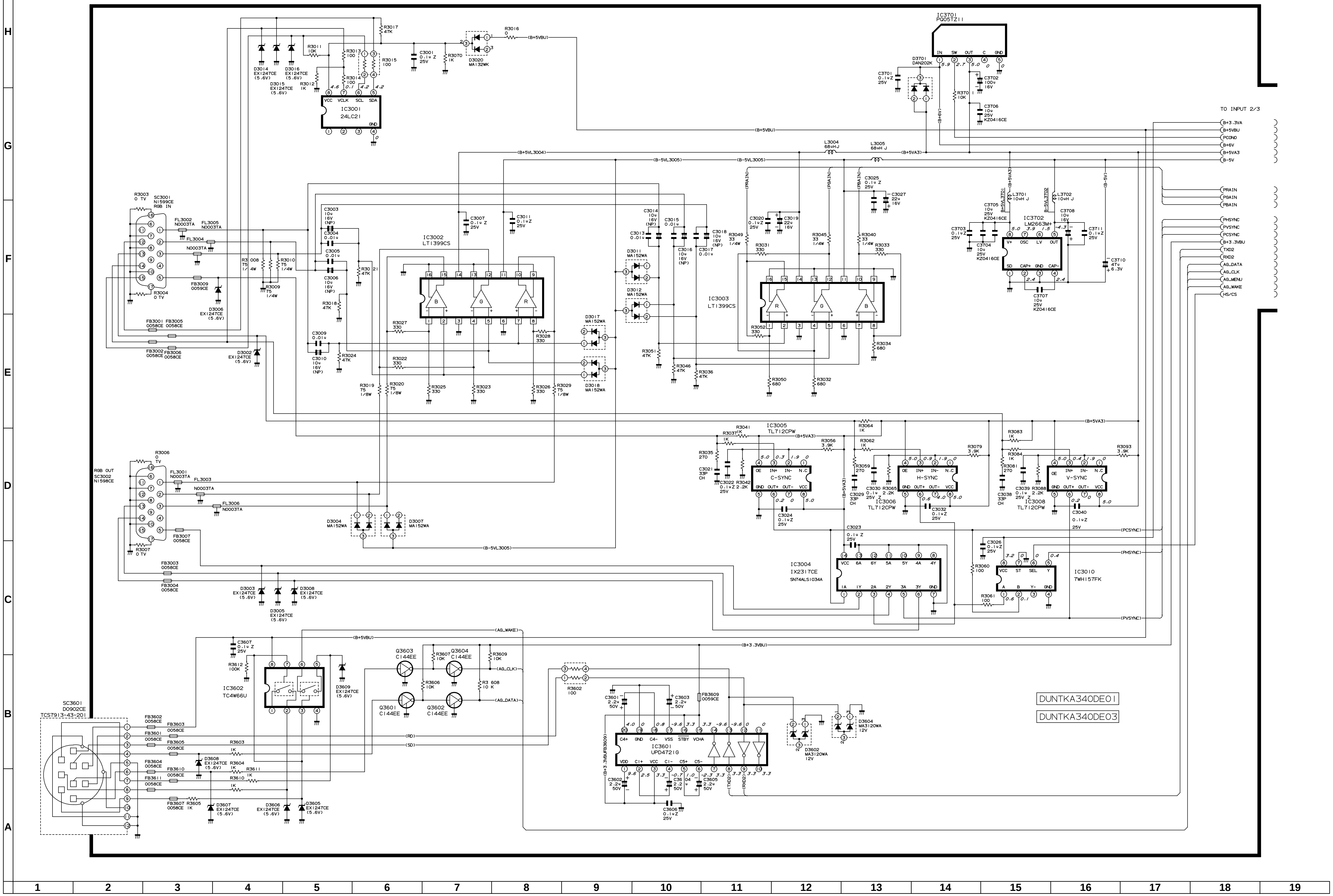
DUNTKA339FE03

PG-C20XU
PG-C20XE
AN-Z7T

■ OUTPUT UNIT / AUSGABEEINHEIT-7/7

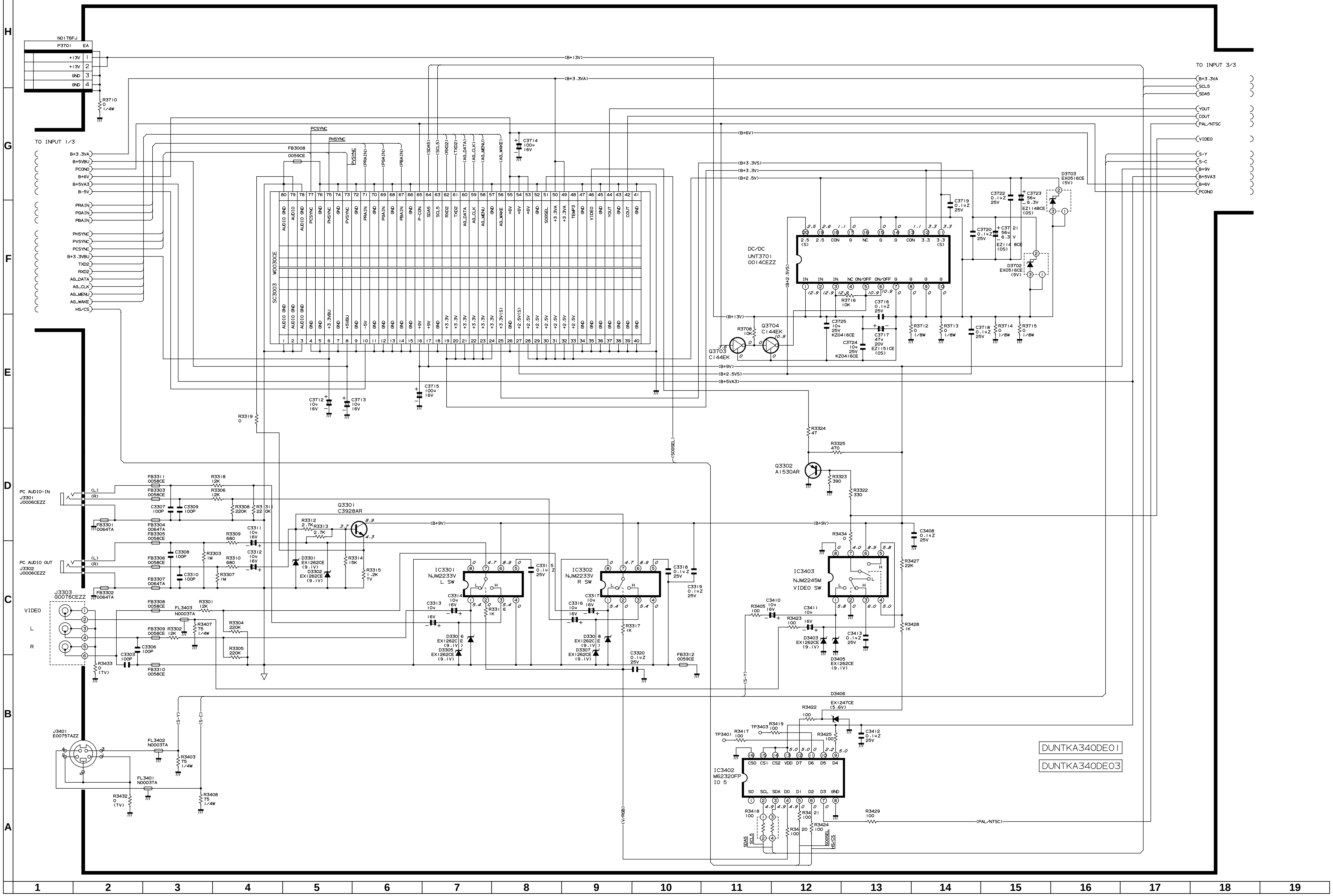


■ INPUT UNIT / EINGANGSEINHEIT-1/3



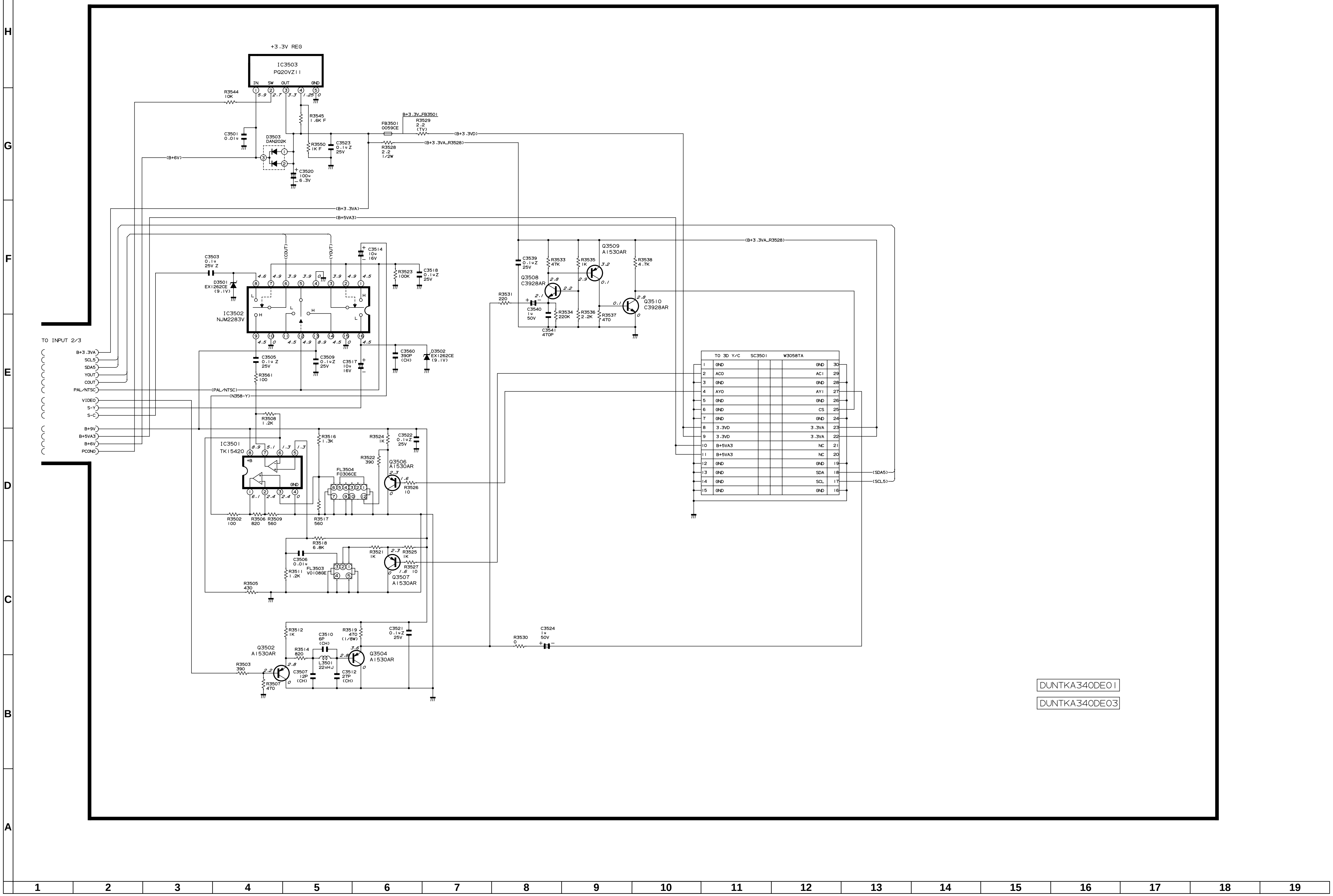
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PG-C20XE
AN-Z7T

■ INPUT UNIT / EINGANGSEINHEIT-2/3

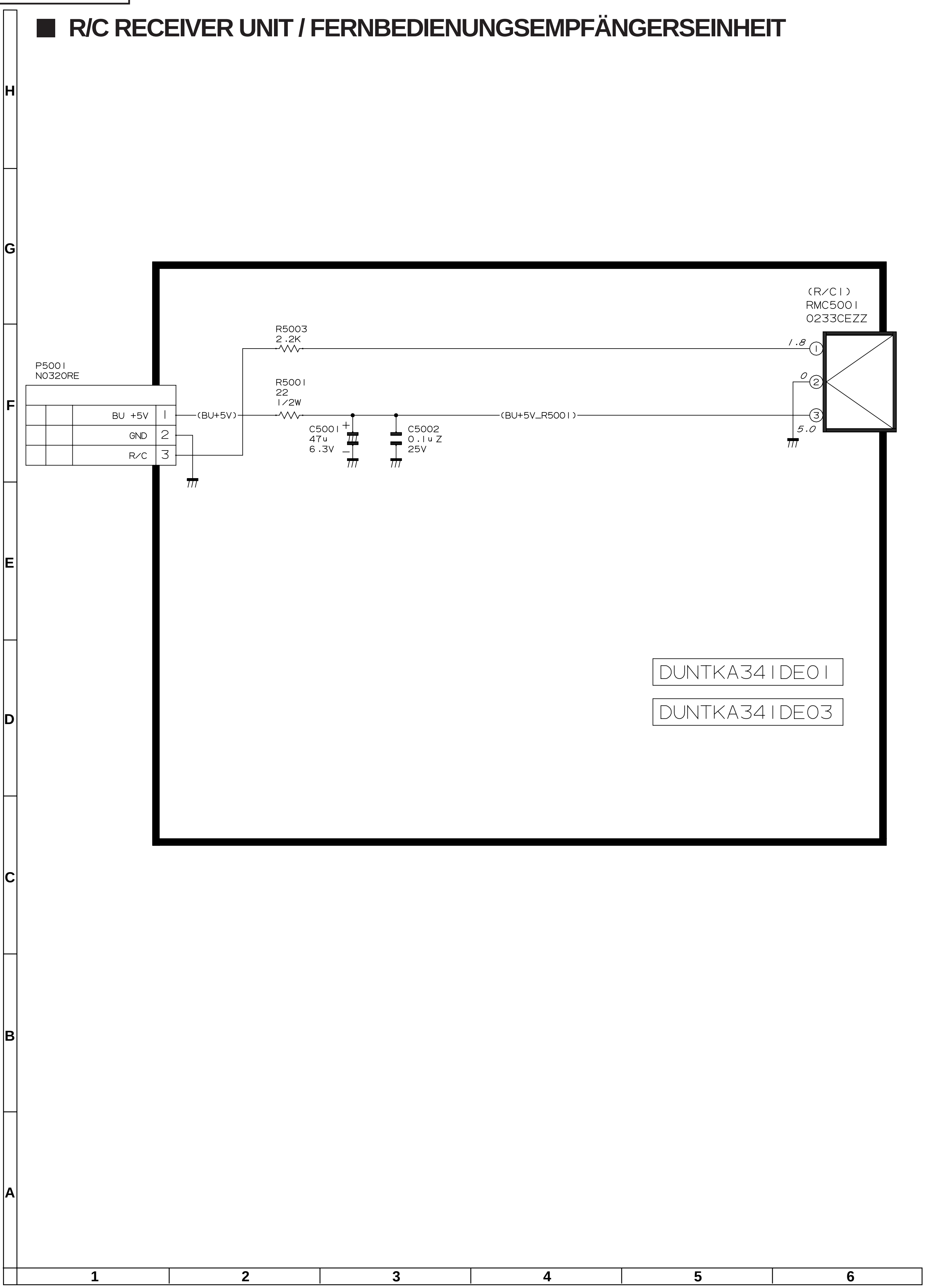


PG-C20XU
PG-C20XE
AN-Z7T

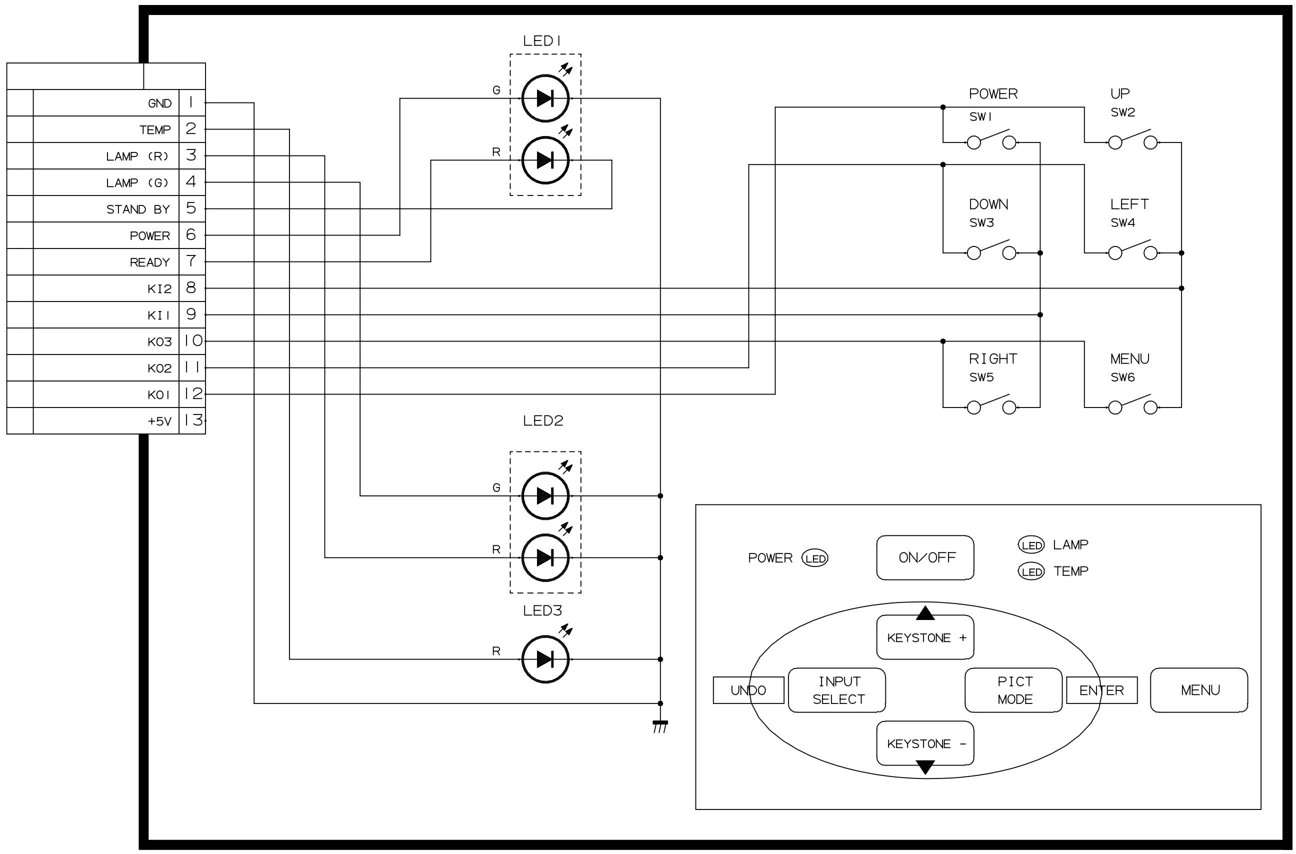
INPUT UNIT / EINGANGSEINHEIT-3/3



R/C RECEIVER UNIT / FERNBEDIENUNGSEMPFÄNGERSEINHEIT

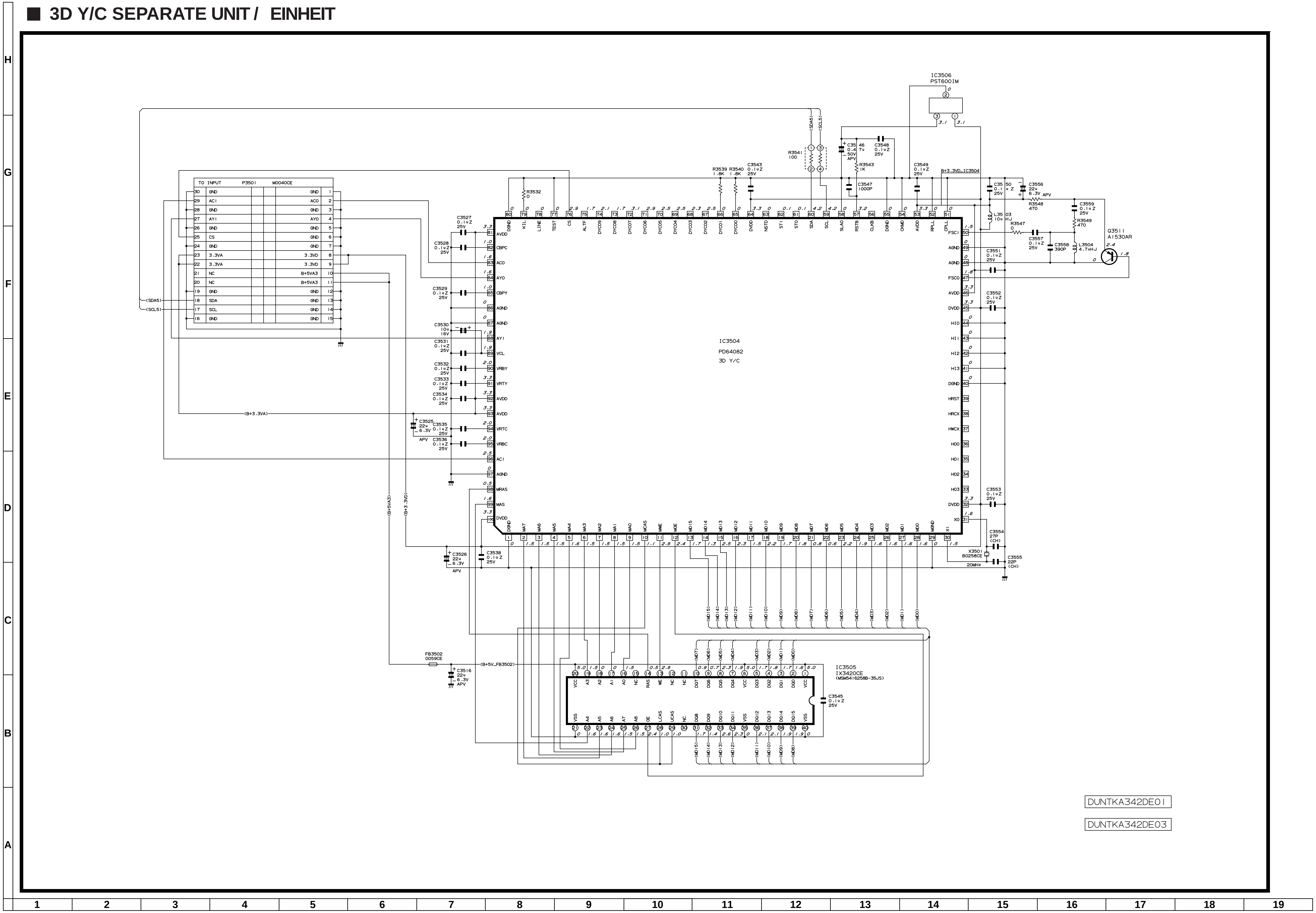


■ OPERATION BOARD UNIT/ BEDIENUNGSPLATINENEINHEIT



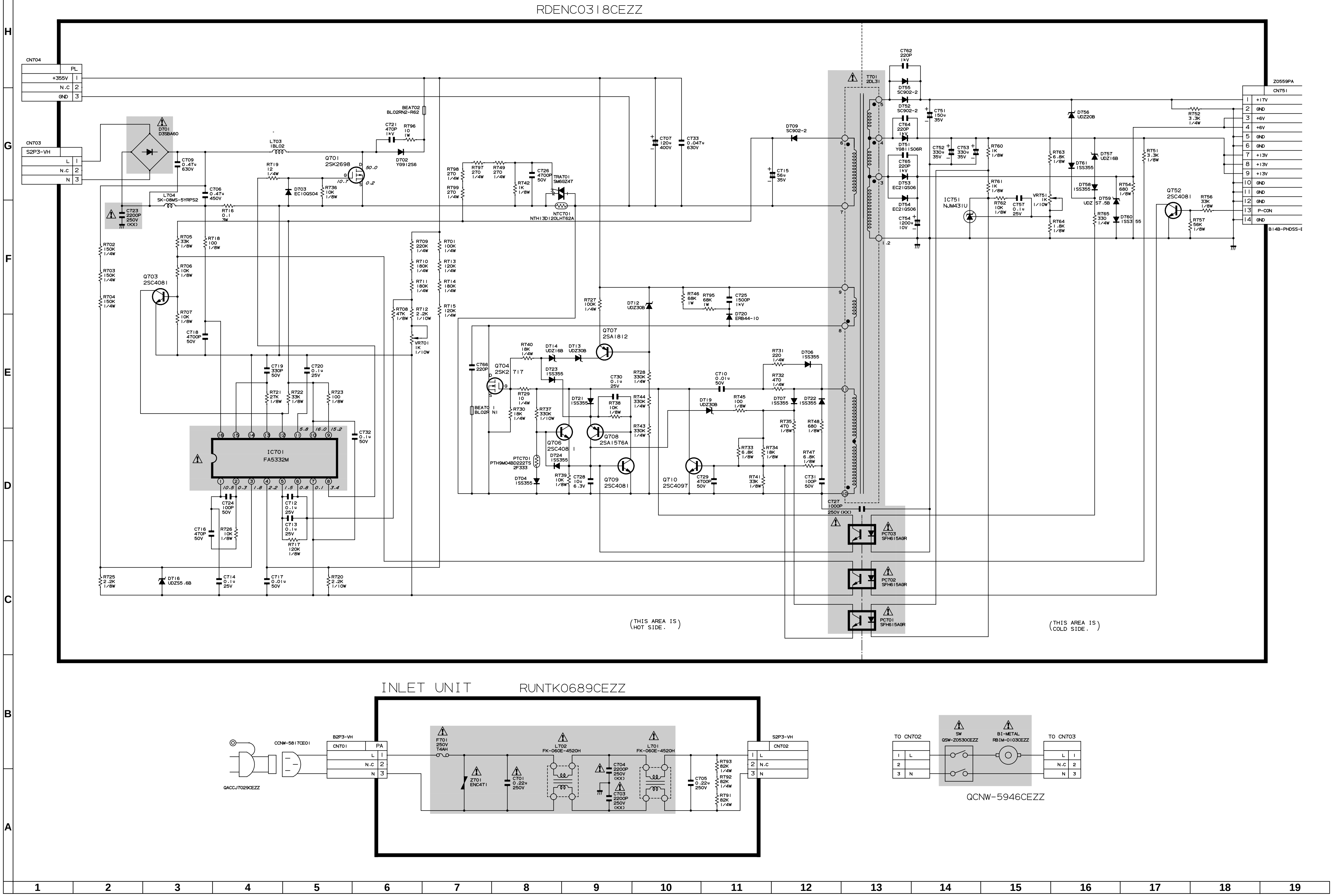
PG-C20XU
PG-C20XE
AN-Z7T

■ 3D Y/C SEPARATE UNIT / EINHEIT



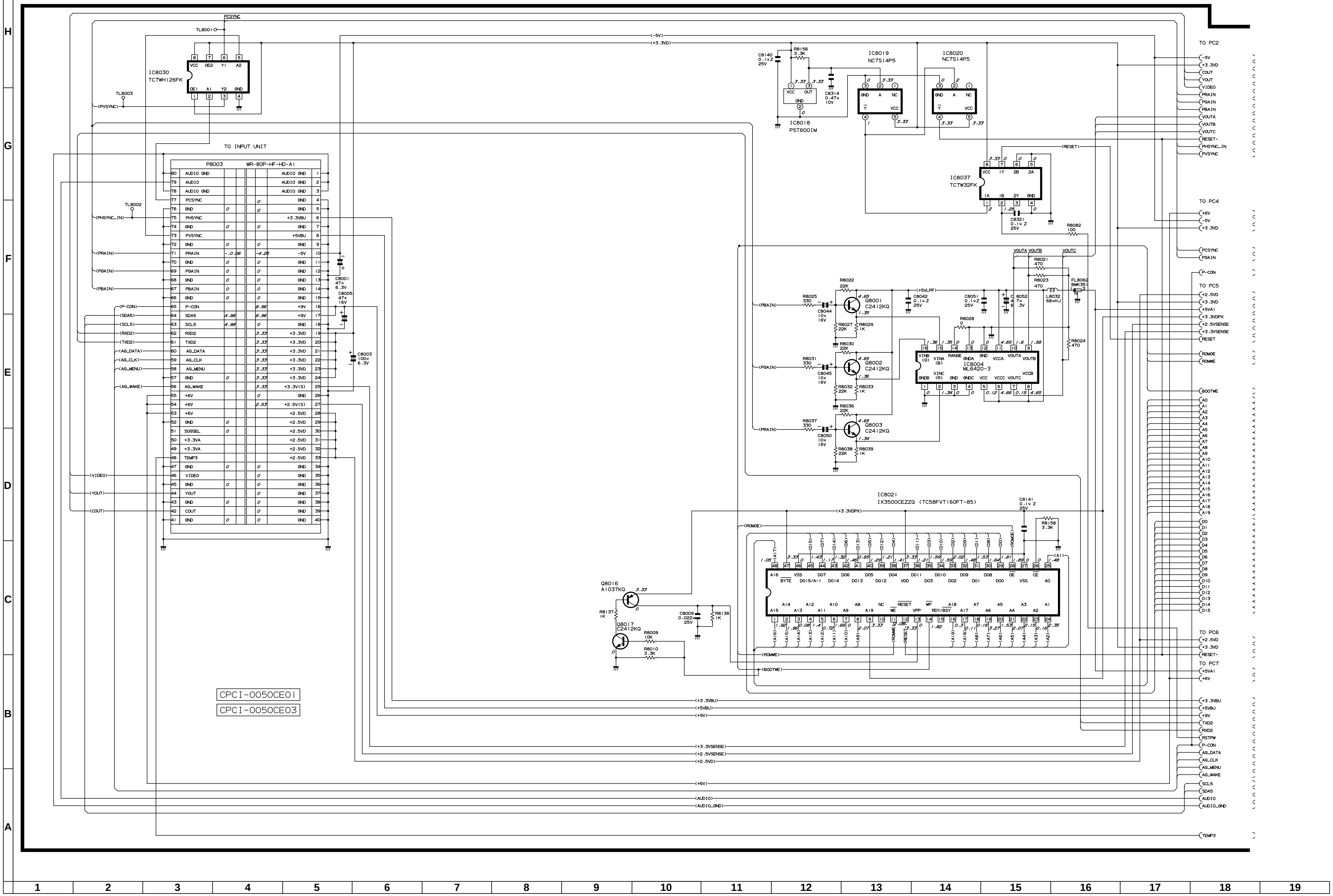
PG-C20XU
PG-C20XE
AN-Z7T

■ POWER AND INLET UNIT / NETZTEILEINHEIT UND EINLASSEINHEIT



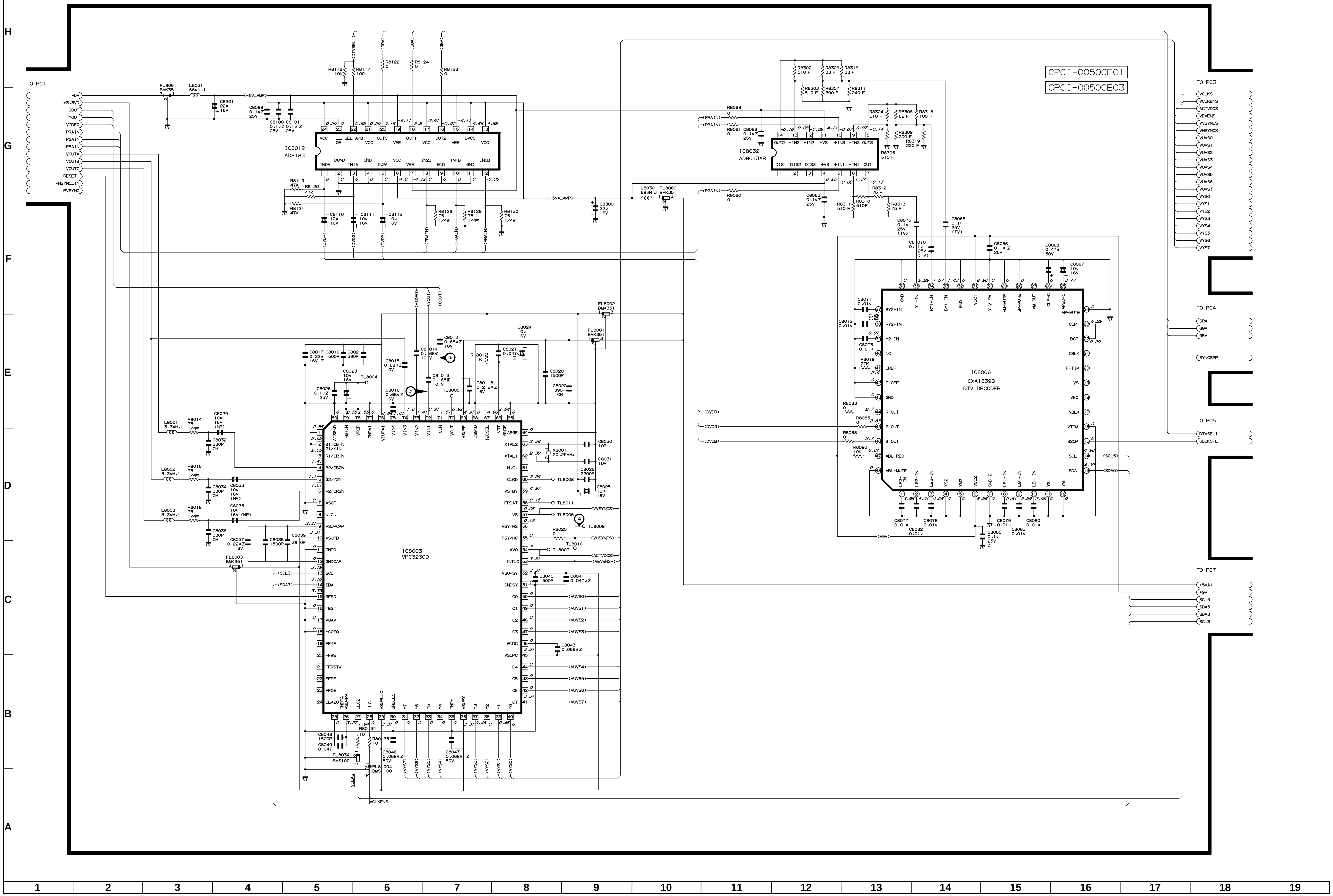
PG-C20XU
PG-C20XE
AN-Z7T

■ PC I/F UNIT / PC-I/F-EINHEIT-1/7



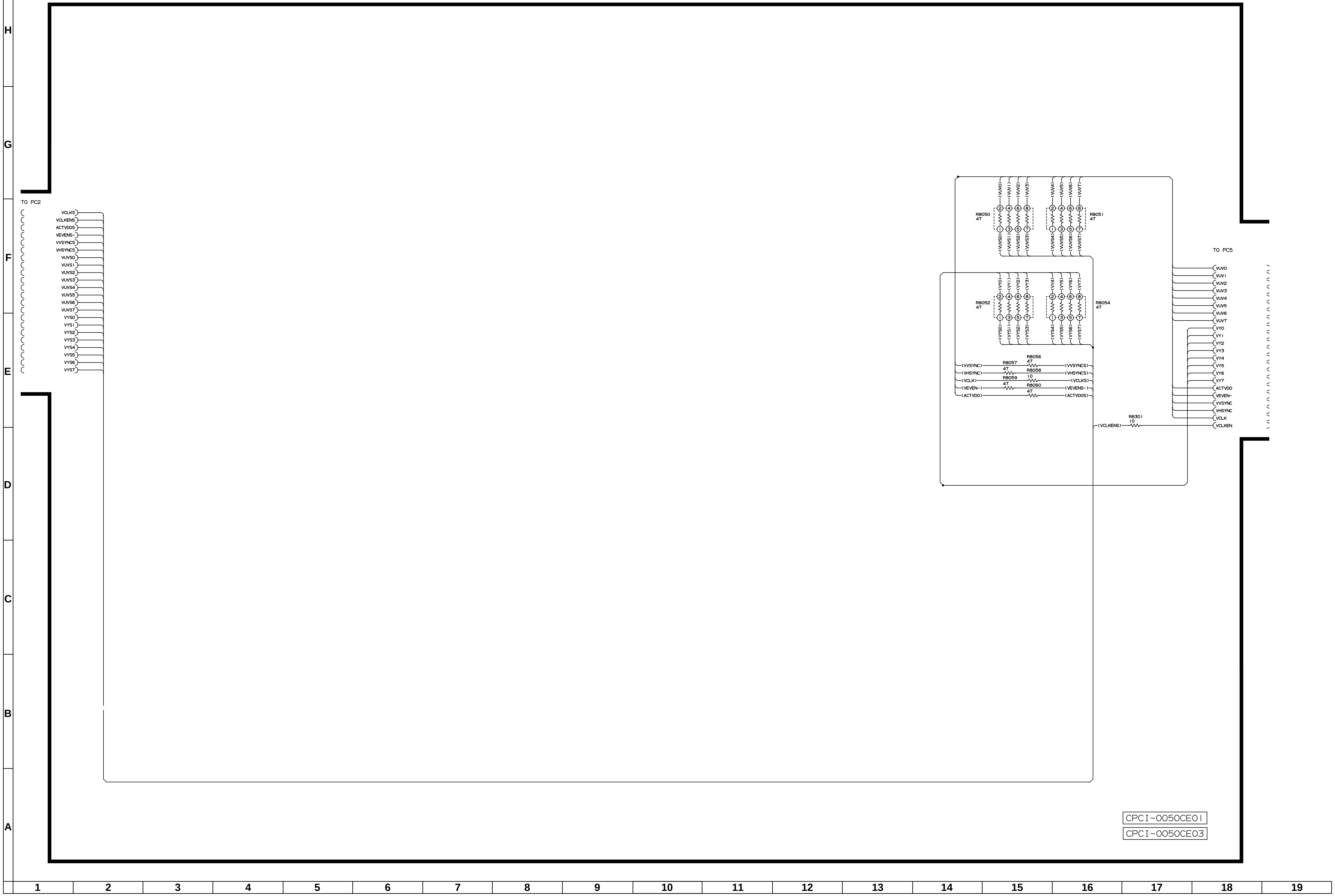
PG-C20XU
PG-C20XE
AN-Z7T

■ PC I/F UNIT / PC-I/F-EINHEIT-2/7



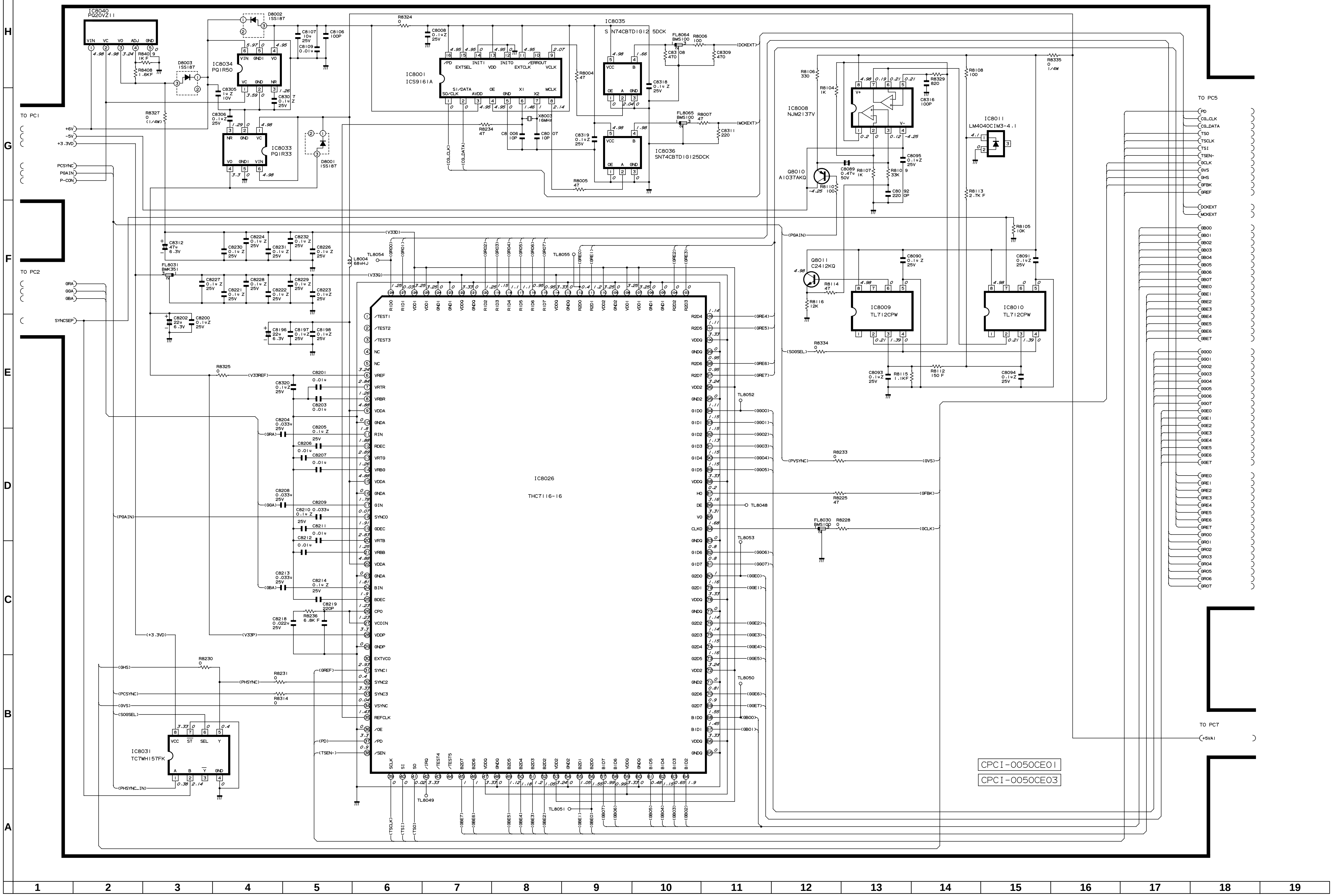
PG-C20XU
PG-C20XE
AN-Z7T

■ PC I/F UNIT / PC-I/F-EINHEIT-3/7



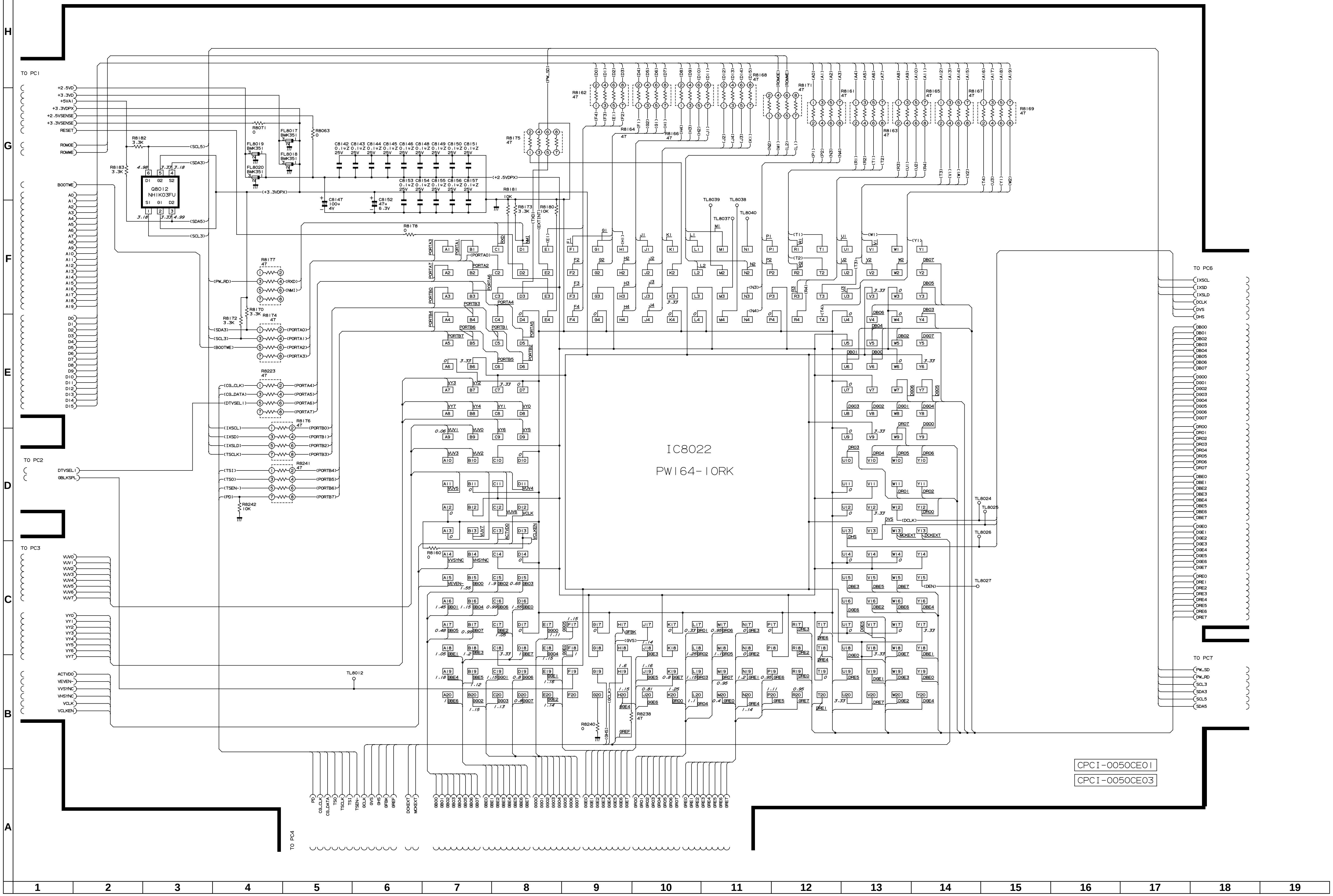
PG-C20XU
PG-C20XE
AN-Z7T

■ PC I/F UNIT / PC-I/F-EINHEIT-4/7

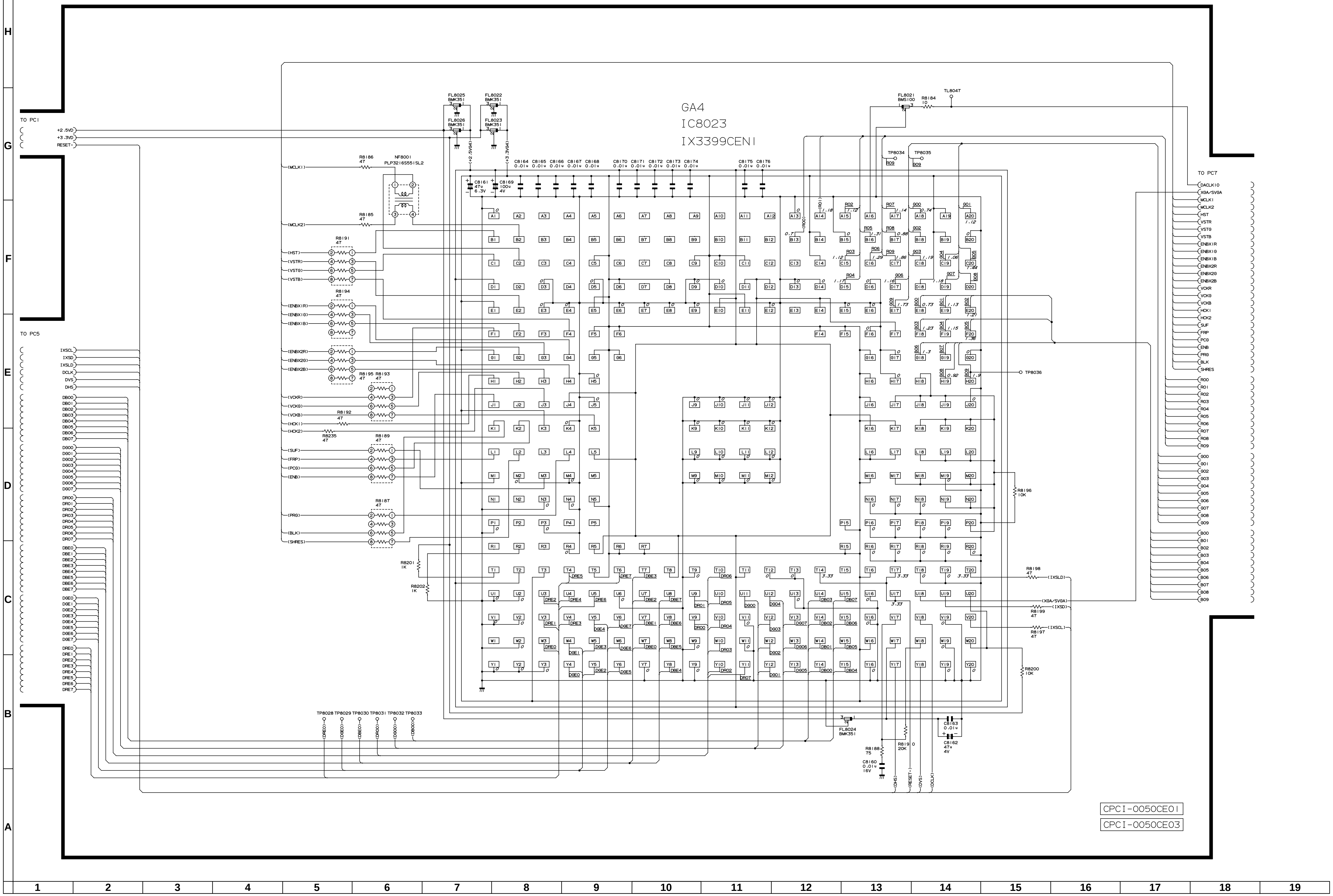


PG-C20XU
PG-C20XE
AN-Z7T

■ PC I/F UNIT / PC-I/F-EINHEIT-5/7

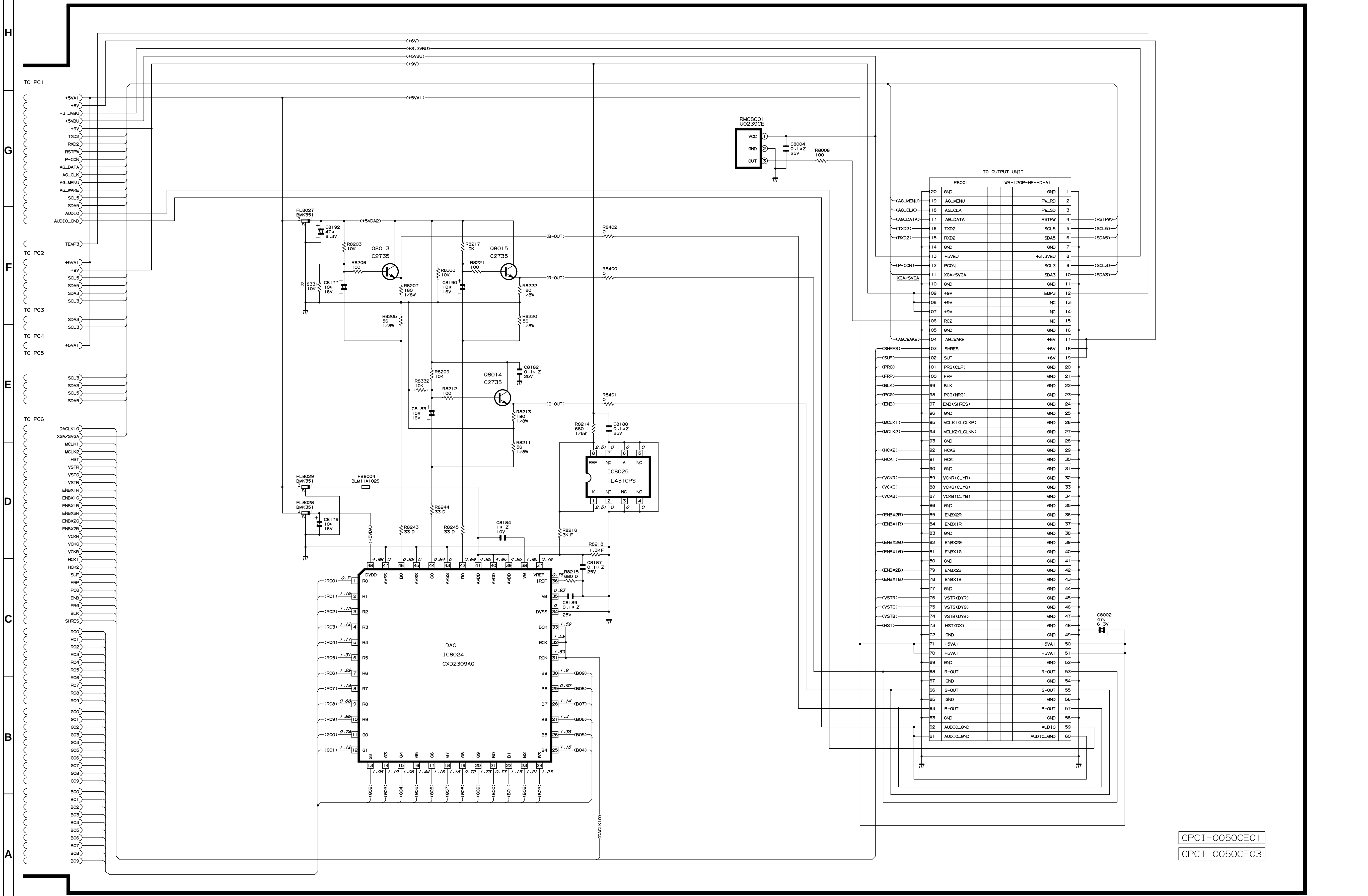


■ PC I/F UNIT / PC-I/F-EINHEIT-6/7



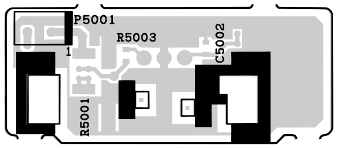
PG-C20XU
PG-C20XE
AN-Z7T

■ PC I/F UNIT / PC-I/F-EINHEIT-7/7

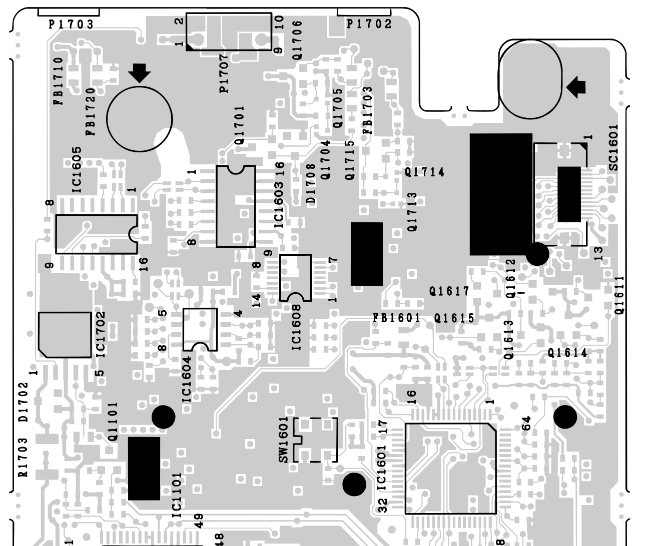
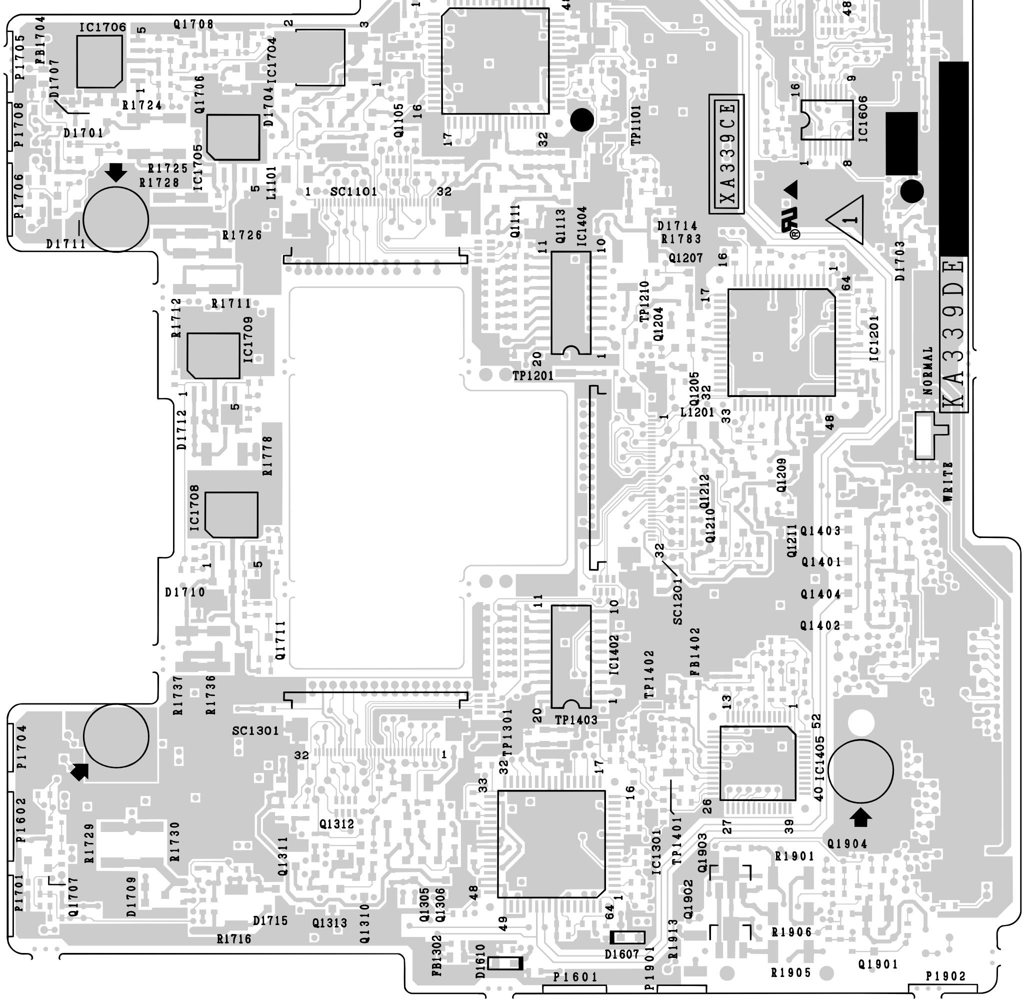


1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19

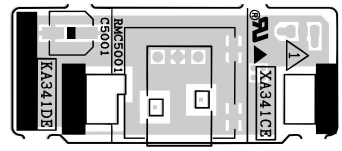
PRINTED WIRING BOARD ASSEMBLIES
LEITERPLATTENEINHEITEN



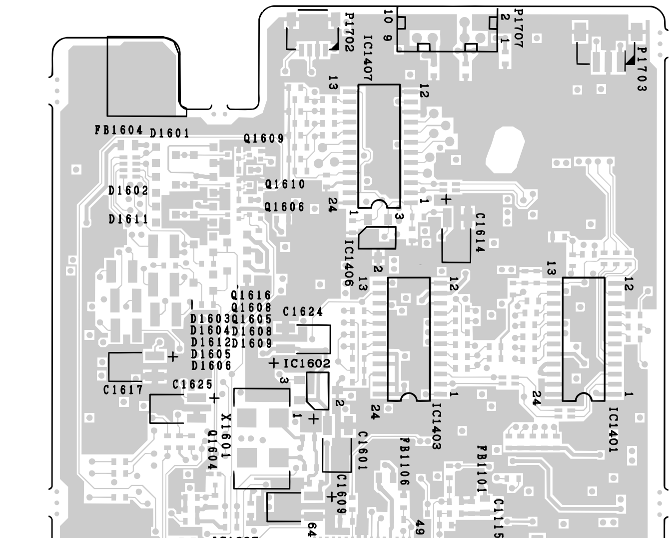
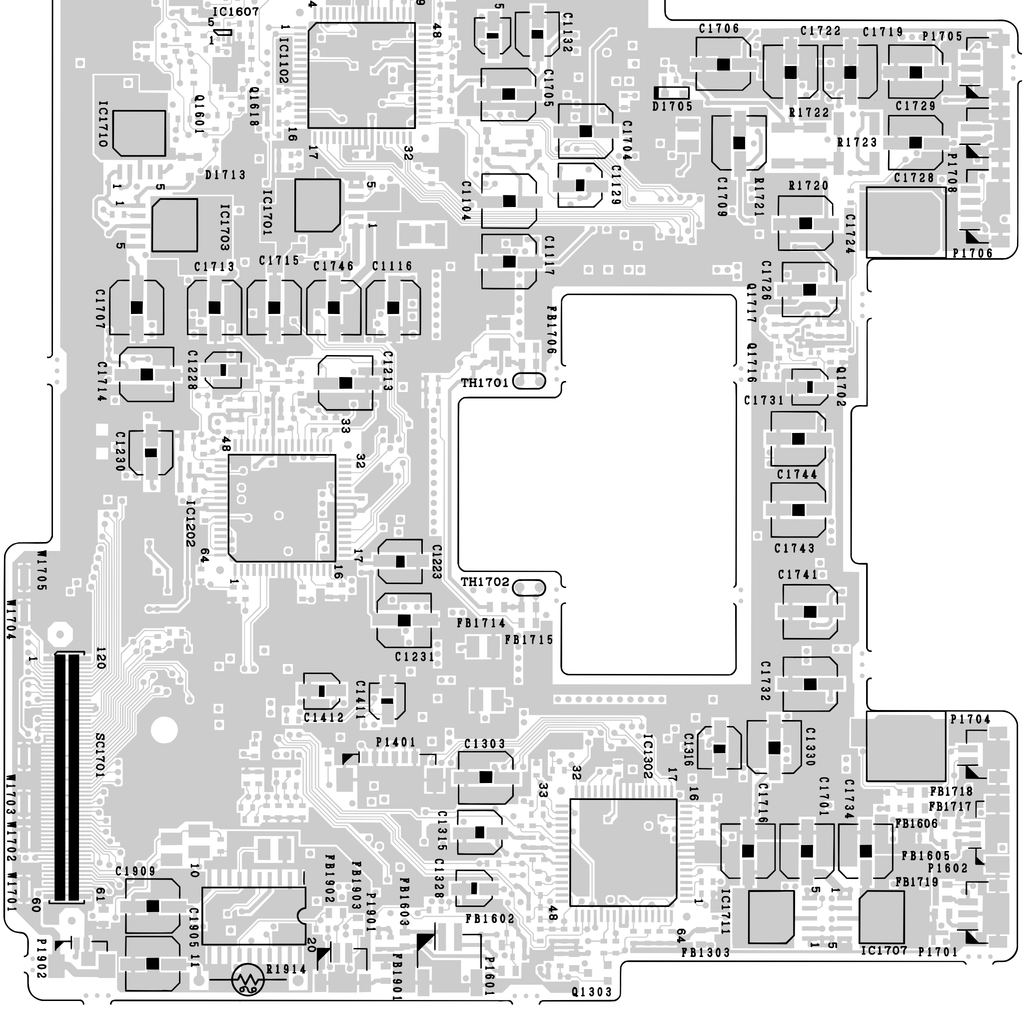
R/C Receiver Unit (Wiring Side)
Fernbedienungsempfängerseinheit
(Leiterbahnseite)

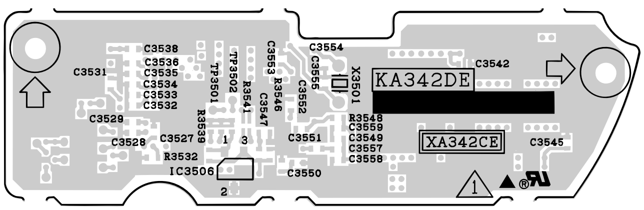
Output Unit (Wiring Side)
Ausgabeeinheit (Leiterbahnseite)



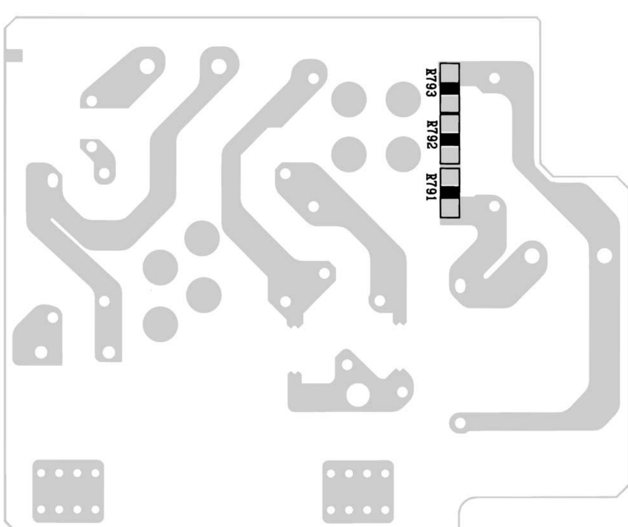
R/C ReceiverUnit (Component Side)
Fernbedienungsempfängerseinheit
(Bestückungsseite)

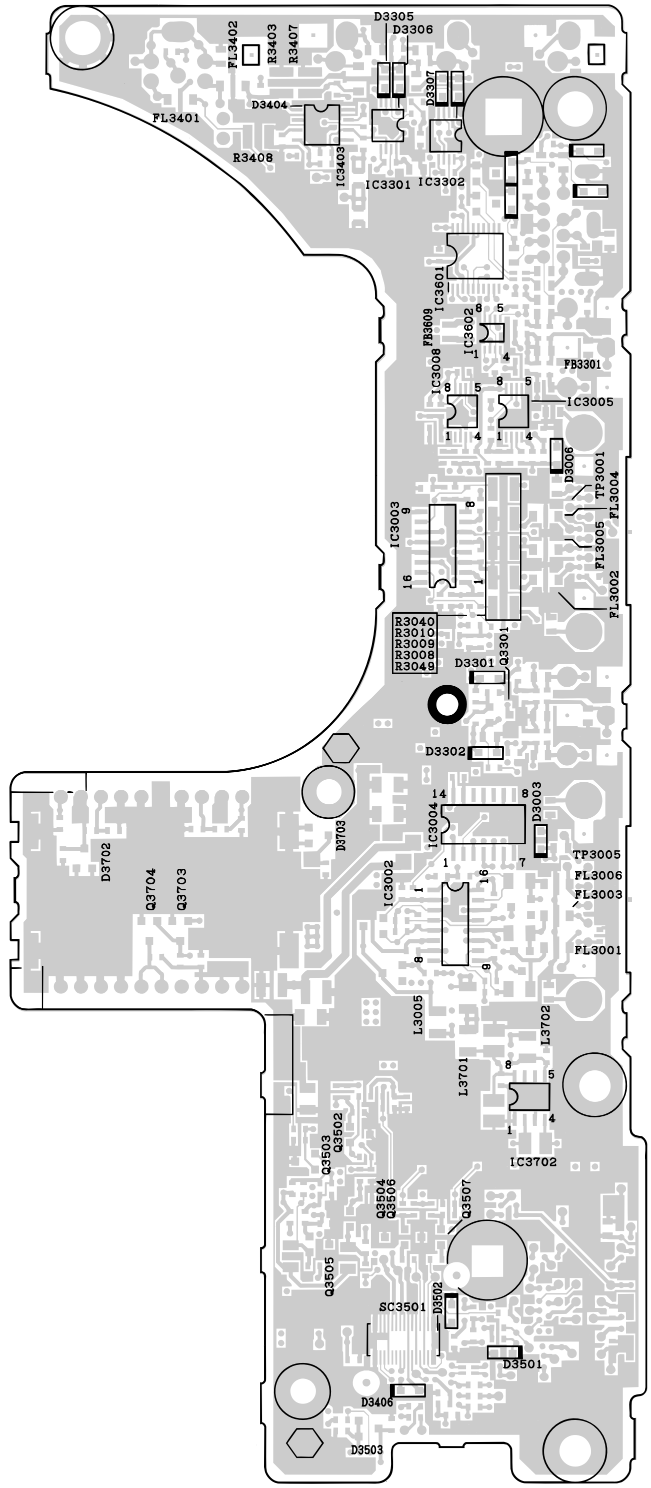
Output Unit (Component Side)
Ausgabeeinheit (Bestückungsseite)



3D Y/C Separation Unit (Wiring Side)
3D Y/C-Trennplatinen-Einheit
(Leiterbahnseite)

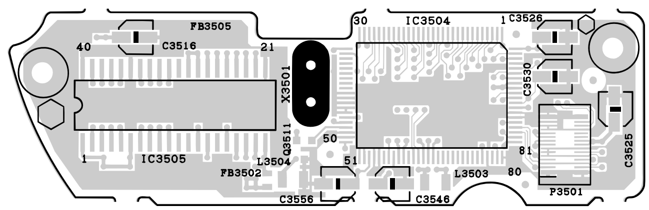


Inlet Unit (Wiring Side)
Einlasseinheit (Leiterbahnseite)

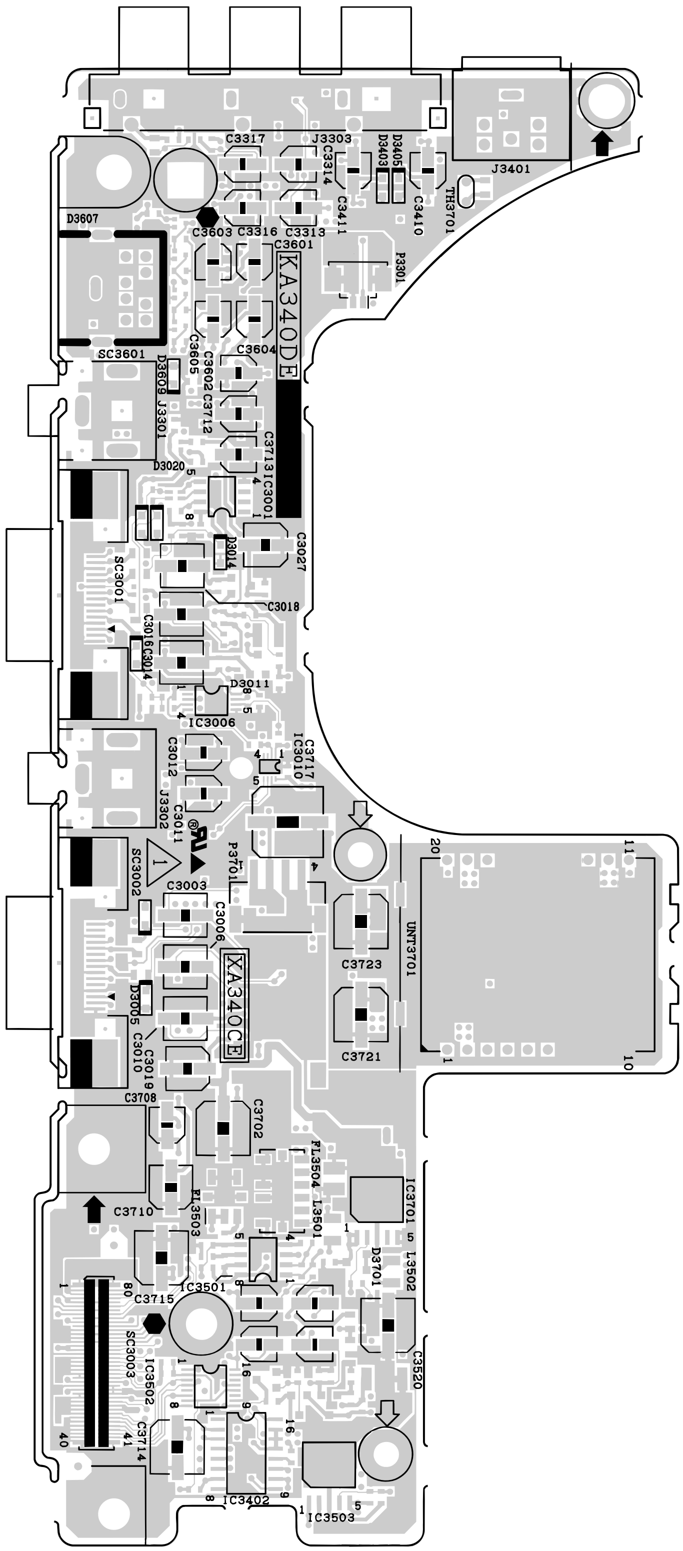


Input Unit (Wiring Side)
Eingangseinheit (Leiterbahnseite)

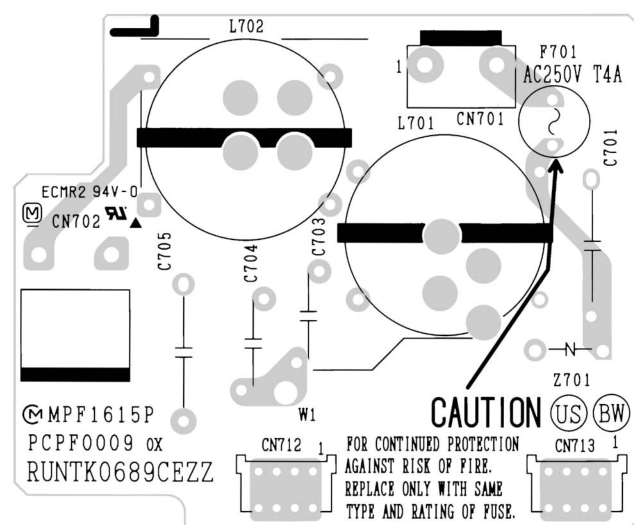
H G F E D C B A
1 2 3 4 5 6



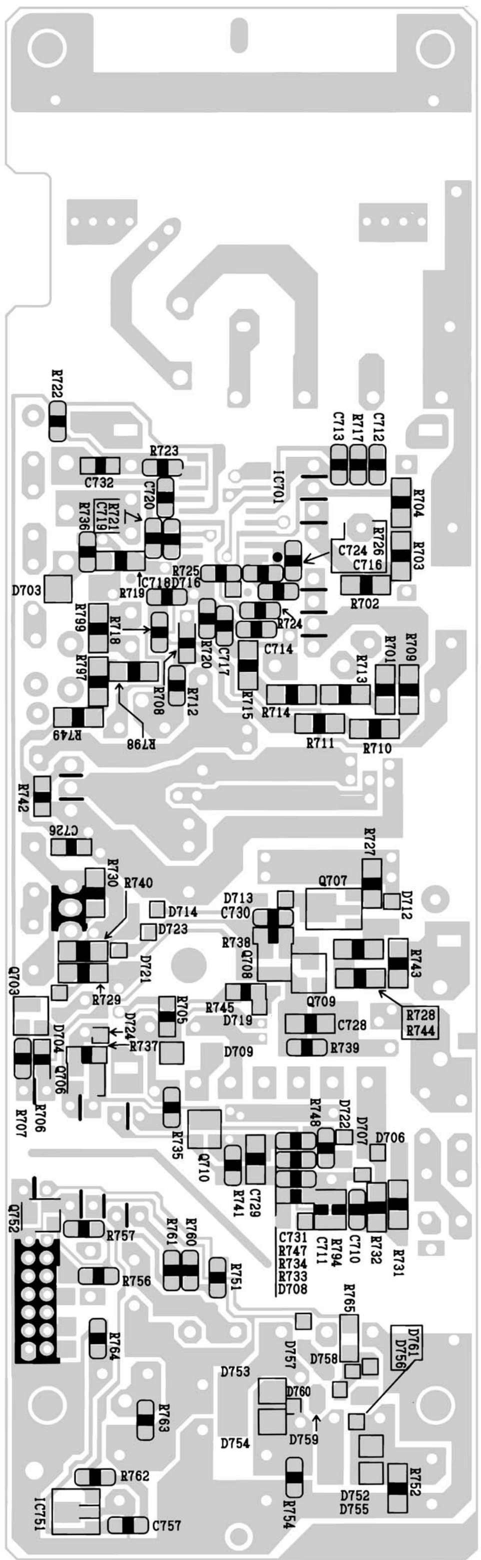
3D Y/C Separation Unit (Component Side)
3D Y/C-Trennplatinen-Einheit
(Bestückungsseite)



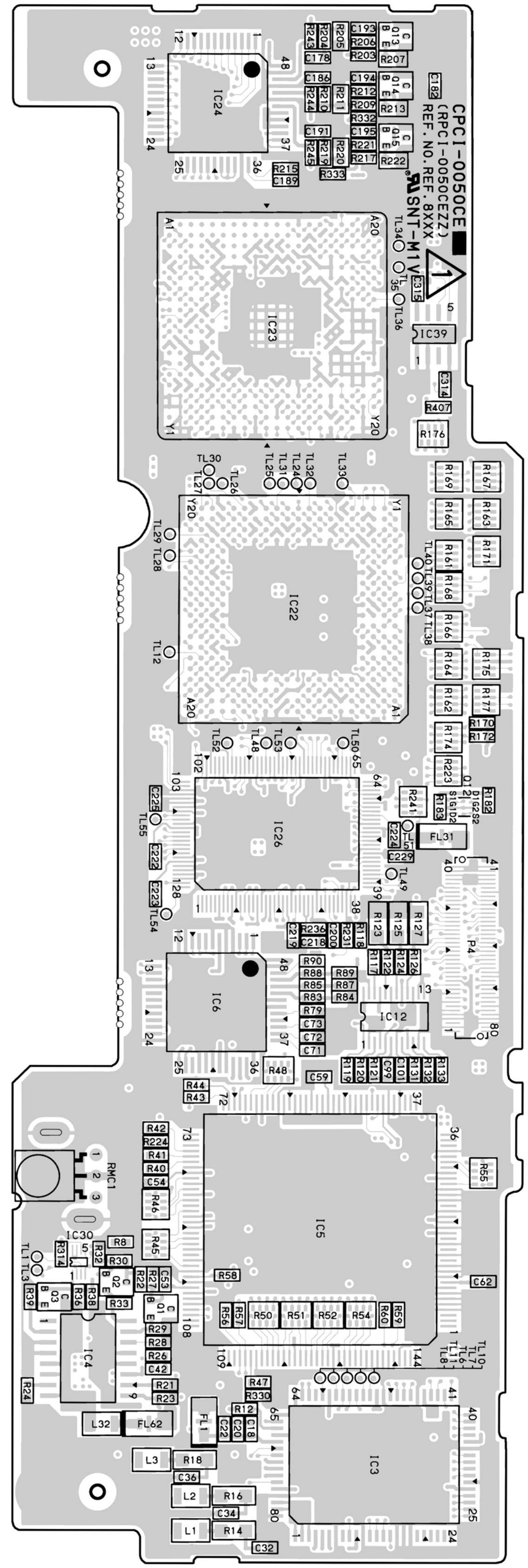
Input Unit (Component Side)
Eingangseinheit (Bestückungsseite)



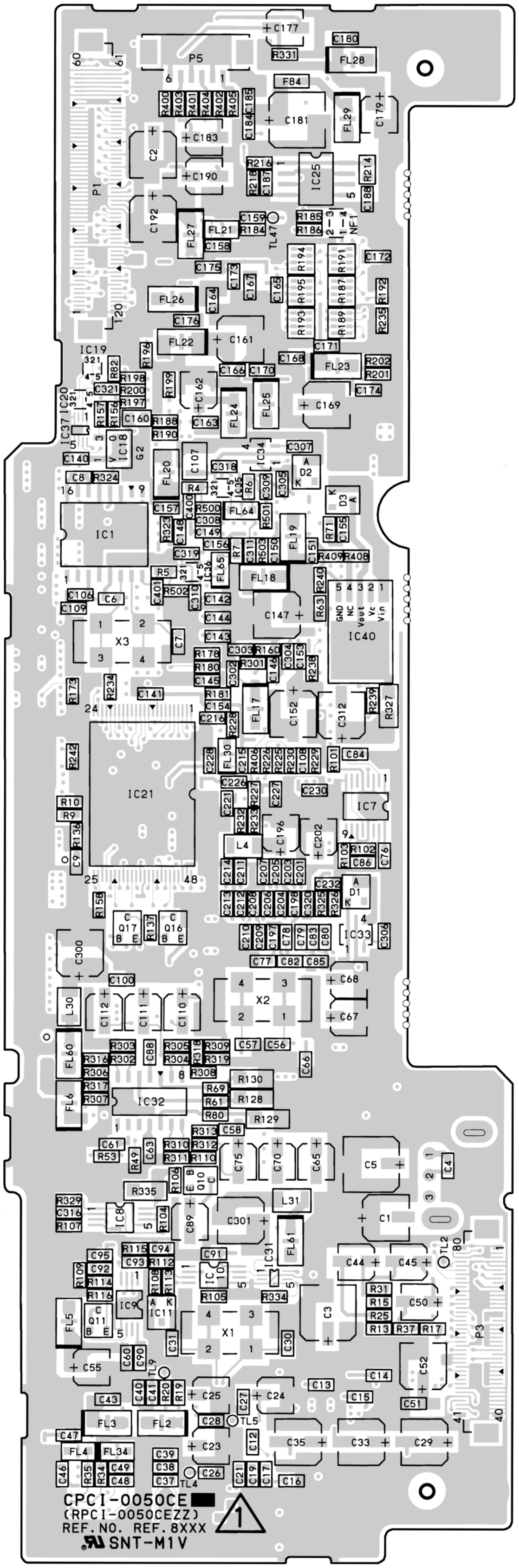
Inlet Unit (Component Side)
Einlasseinheit (Bestückungsseite)



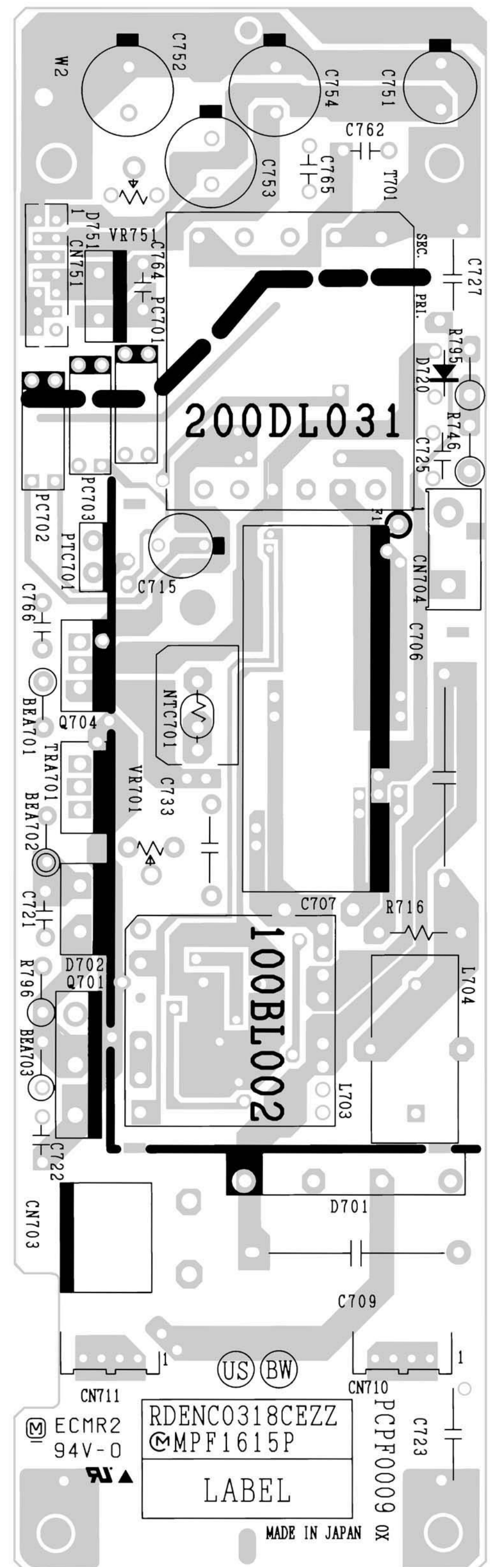
Power Unit (Wiring Side)
Netzteinheit (Leiterbahnseite)



PC I/F Unit (Wiring Side)
PC-I/F-einheit (Leiterbahnseite)



PC I/F Unit (Component Side)
PC-I/F-einheit (Bestückungsseite)



Power Unit (Component Side)
Netzteinheit (Bestückungsseite)

PARTS LIST

PARTS REPLACEMENT

Parts marked with "⚠" are important for maintaining the safety of the set. Be sure to replace these parts with specified ones for maintaining the safety and performance of the set.

"HOW TO ORDER REPLACEMENT PARTS"

To have your order filled promptly and correctly, please furnish the following informations.

1. MODEL NUMBER 2. REF. NO.
3. PART NO. 4. DESCRIPTION
5. CODE 6. QUANTITY

in **USA**: Contact your nearest SHARP Parts Distributor. For location of SHARP Parts Distributor, Please call Toll-Free; 1-800-BE-SHARP

in **CANADA**: Contact SHARP Electronics of Canada Limited Phone (416) 890-2100.

ERSATZTEILLISTE

AUSTAUSCH VON TEILEN

Ersatzteile, die besondere Sicherheitseigenschften haben, sind in dieser Anleitung markiert. Elektrische Komponenten mit solchen Eigenshaften sind in den Ersatzteil durch "⚠" gekenn-zeichnet. Der Gebrauch von Ersatzteilen, die nicht deselben Sicherheits-eigenschaften haben wie die vom Hersteller empfohlenen ud in der Bedienungsanleitung angegebenen, können zur Ursache von Blitzeinschlägen, Bränden und anderen Gefahren werden.

"WIE MAN ERSATSTEILE BESTELLT"

Damit Ihre Bestellung promt und korrekt ausgeführt wird, geben Sie bitte folgende Informationen.

1. MODELL NR. 2. REF. NR.
3. ERSATZTEIL NR. 4. BESCHREIBUNG
5. KODE 6. QUANTITÄT

★ MARK: SPARE PARTS-DELIVERY SECTION

★ MARKIERUNG : ERSATZTEILE-LIEFERUNG

LCD PANELS

NOTE: THE PARTS HERE SHOWN ARE SUPPLIED AS AN ASSEMBLY BUT NOT INDEPENDENTLY.

Ref. No.	Part No.	★	Description	Code
	RLCDP0111CEZZ	J	LCD Module Unit, Red	CR
	RLCDP0112CEZZ	J	LCD Module Unit, Green	CR
	RLCDP0113CEZZ	J	LCD Module Unit, Blue	CR

PRINTED WIRING BOARD ASSEMBLIES
(NOT REPLACEMENT ITEM)

(PG-C20XU)

Ref. No.	Part No.	★	Description	Code
	DUNTKA339FE01	–	Output Unit	—
	DUNTKA340DE01	–	Input Unit	—
	DUNTKA341DE01	–	R/C Receiver Unit	—
	DUNTKA342DE01	–	3D Y/C Separate Unit	—
	RUNTK0689CEZZ	–	Inlet Unit	—
	RDENC0318CEZZ	–	Power Unit	—
	CPCi-0050CE01	–	PC I/F Unit	—
	RDENC0319CEZZ	J	Ballast Unit (Unit Replacement Item)	CB

(PG-C20XE)

Ref. No.	Part No.	★	Description	Code
	DUNTKA339FE03	–	Output Unit	—
	DUNTKA340DE03	–	Input Unit	—
	DUNTKA341DE03	–	R/C Receiver Unit	—
	DUNTKA342DE03	–	3D Y/C Separate Unit	—
	RUNTK0689CEZZ	–	Inlet Unit	—
	RDENC0318CEZZ	–	Power Unit	—
	CPCi-0050CE03	–	PC I/F Unit	—
	RDENC0319CEZZ	J	Ballast Unit (Unit Replacement Item)	CB

DUNTKA339FE01/03
OUTPUT UNIT

INTEGRATED CIRCUITS

Ref. No.	Part No.	★	Description	Code
IC1101	VHiCXA3512R-1	J	CXA3512R-T6	BB
IC1102	VHiCXA3512R-1	J	CXA3512R-T6	BB
IC1201	VHiCXA3512R-1	J	CXA3512R-T6	BB
IC1202	VHiCXA3512R-1	J	CXA3512R-T6	BB
IC1301	VHiCXA3512R-1	J	CXA3512R-T6	BB
IC1302	VHiCXA3512R-1	J	CXA3512R-T6	BB
IC1401	VHiM62398FP-1	J	M62398FP	AM
IC1402	VHiHCT541AF-1	J	TC74HCT541AF	AG
IC1403	VHiM62392FP-1	J	M62392FP	AM
IC1404	VHiHCT541AF-1	J	TC74HCT541AF	AG
IC1405	VHiCXA2111R-1	J	CXA2111R	BB
IC1406	VHiPST600CM-1	J	IC-PST600CMT	AE
IC1601	RH-iX3547CEZZQ	J	Ic	AR
IC1602	VHiPST600iM-1	J	IC-PST600IMT	AE
IC1603	VHiM62320FP-1	J	M62320FP	AK
IC1605	VHiM62320FP-1	J	M62320FP	AK
IC1606	VHi74LVC257-1*	J	SN74LVC257APWR	AG
IC1607	VHiT7SET08U-1	J	TC7SET08FU	AE
IC1608	VHiHN24256T-1*	J		AT
IC1609	RH-iX1427CEZZ	J	TC74HC08AF	AF
IC1701	VHiPQ20VZ11-1	J	PQ20VZ11	AH
IC1702	VHiPQ20VZ11-1	J	PQ20VZ11	AH
IC1703	VHiPQ05TZ11-1	J	PQ05TZ11	AH
IC1704	VHiBA033FP/-1	J	BA033FP-E2	AG
IC1705	VHiPQ05TZ11-1	J	PQ05TZ11	AH
IC1706	VHiPQ20VZ11-1	J	PQ20VZ11	AH
IC1707	VHiPQ20VZ11-1	J	PQ20VZ11	AH
IC1708	VHiPQ20VZ11-1	J	PQ20VZ11	AH
IC1709	VHiPQ20VZ11-1	J	PQ20VZ11	AH
IC1710	VHiPQ05TZ11-1	J	PQ05TZ11	AH
IC1711	VHiPQ20VZ11-1	J	PQ20VZ11	AH
IC1901	VHiDA7056AT-1	J	TDA7056AT/N2	

TRANSISTORS

Ref. No.	Part No.	★	Description	Code
Q1101	VS2SA1530AR-1	J	2SA1530AR	AB
Q1105	VS2SA1036KR-1	J	2SA1036KR	AC
Q1106	VS2SC2411KR-1	J	2SC2411KR	AC
Q1108	VS2SC2411KR-1	J	2SC2411KR	AC
Q1109	VS2SA1036KR-1	J	2SA1036KR	AC
Q1110	VS2SC2411KR-1	J	2SC2411KR	AC
Q1111	VS2SC2411KR-1	J	2SC2411KR	AC

DUNTKA339FE01/03
OUTPUT UNIT (Continued)

Ref. No.	Part No.	★	Description	Code
Q1112	VS2SA1036KR-1	J	2SA1036KR	AC
Q1113	VS2SA1036KR-1	J	2SA1036KR	AC
Q1204	VS2SA1036KR-1	J	2SA1036KR	AC
Q1205	VS2SC2411KR-1	J	2SC2411KR	AC
Q1207	VS2SC2411KR-1	J	2SC2411KR	AC
Q1208	VS2SA1036KR-1	J	2SA1036KR	AC
Q1209	VS2SC2411KR-1	J	2SC2411KR	AC
Q1210	VS2SC2411KR-1	J	2SC2411KR	AC
Q1211	VS2SA1036KR-1	J	2SA1036KR	AC
Q1212	VS2SA1036KR-1	J	2SA1036KR	AC
Q1303	VS2SA1530AR-1	J	2SA1530AR	AB
Q1305	VS2SA1036KR-1	J	2SA1036KR	AC
Q1306	VS2SC2411KR-1	J	2SC2411KR	AC
Q1308	VS2SC2411KR-1	J	2SC2411KR	AC
Q1309	VS2SA1036KR-1	J	2SA1036KR	AC
Q1310	VS2SC2411KR-1	J	2SC2411KR	AC
Q1311	VS2SC2411KR-1	J	2SC2411KR	AC
Q1312	VS2SA1036KR-1	J	2SA1036KR	AC
Q1313	VS2SA1036KR-1	J	2SA1036KR	AC
Q1401	VS2SC2735//1E	J	2SC2735	AC
Q1402	VS2SC2735//1E	J	2SC2735	AC
Q1403	VS2SC2735//1E	J	2SC2735	AC
Q1404	VS2SC2735//1E	J	2SC2735	AC
Q1601	VSDTC144EE/-1	J	DTC144EE	AA
Q1602	VSDTC144EE/-1	J	DTC144EE	AA
Q1603	VSDTC144EE/-1	J	DTC144EE	AA
Q1604	VSDTC144EE/-1	J	DTC144EE	AA
Q1605	VSDTC144EE/-1	J	DTC144EE	AA
Q1606	VSDTC144EE/-1	J	DTC144EE	AA
Q1607	VSDTC144EE/-1	J	DTC144EE	AA
Q1608	VSDTC144EE/-1	J	DTC144EE	AA
Q1609	VSDTC144EE/-1	J	DTC144EE	AA
Q1610	VSDTC144EE/-1	J	DTC144EE	AA
Q1611	VS2SC3928AR-1	J	2SC3928AR	AB
Q1612	VS2SC3928AR-1	J	2SC3928AR	AB
Q1613	VS2SC3928AR-1	J	2SC3928AR	AB
Q1614	VS2SC3928AR-1	J	2SC3928AR	AB
Q1615	VS2SC3928AR-1	J	2SC3928AR	AB
Q1617	VS2SA1530AR-1	J	2SA1530AR	AB
Q1618	VSDTC144EE/-1	J	DTC144EE	AA
Q1701	VS2SC3928AR-1	J	2SC3928AR	AB
Q1702	VSDTC114EE/-1	J	DTC114EE	AB
Q1704	VSDTC144EE/-1	J	DTC144EE	AA
Q1705	VSDTC144EE/-1	J	DTC144EE	AA
Q1706	VS2SC3928AR-1	J	2SC3928AR	AB
Q1708	VS2SA1036KR-1	J	2SA1036KR	AC
Q1709	VSDTC114EE/-1	J	DTC114EE	AB
Q1711	VS2SA1036KR-1	J	2SA1036KR	AC
Q1712	VSDTC114EE/-1	J	DTC114EE	AB
Q1713	VSDTC144EE/-1	J	DTC144EE	AA
Q1714	VSDTC144EE/-1	J	DTC144EE	AA
Q1715	VS2SC3928AR-1	J	2SC3928AR	AB
Q1716	VSDTC114EE/-1	J	DTC114EE	AB
Q1717	VSDTC114EE/-1	J	DTC114EE	AB
Q1901	VS2SC3928AR-1	J	2SC3928AR	AB
Q1904	VSDTC144EE/-1	J	DTC144EE	AA
			DIODES AND THERMISTER	
D1601	VHDHRW0702A-1	J	Diode	AE
D1602	VHDHRW0702A-1	J	Diode	AE
D1603	VHDMA153///-1	J	Diode	AB
D1604	VHDMA153///-1	J	Diode	AB
D1605	VHDHRW0702A-1	J	Diode	AE
D1606	VHDHRW0702A-1	J	Diode	AE
D1607	RH-EX1247CEZZ*	J	Zener Diode	AB
D1608	VHDMA153///-1	J	Diode	AB
D1609	VHDMA153///-1	J	Diode	AB
D1610	RH-EX1247CEZZ*	J	Zener Diode	AB
D1611	VHDHRW0702A-1	J	Diode	AE
D1612	VHDMA153///-1	J	Diode	AB
D1701	VHDDAN202K/-1	J	Diode	AB
D1702	VHDDAN202K/-1	J	Diode	AB
D1703	VHDDAN202K/-1	J	Diode	AB
D1704	VHDDAN202K/-1	J	Diode	AB
D1706	VHDDAN202K/-1	J	Diode	AB
D1707	VHDDAN202K/-1	J	Diode	AB
D1708	RH-EX0516CEZZ	J	Zener Diode	AB
D1709	VHDDAN202K/-1	J	Diode	AB
D1710	VHDDAN202K/-1	J	Diode	AB
D1711	VHDDAN202K/-1	J	Diode	AB
D1712	VHDDAN202K/-1	J	Diode	AB
D1713	VHDDAN202K/-1	J	Diode	AB
D1714	VHDDAN202K/-1	J	Diode	AB
D1715	VHDDAN202K/-1	J	Diode	AB
TH1701	RH-HZ0089CEZZ	J	Thermister	AE
			PACKAGED CIRCUITS	
X1601	RCRSB0286CEZZ	J	Crystal	AH
			COILS	
L1101	VP-1M100J1R6N	J	Peaking 10µH	AC
L1201	VP-1M100J1R6N	J	Peaking 10µH	AC
L1301	VP-1M100J1R6N	J	Peaking 10µH	AC
			CAPACITORS	
C1101	VCKYCY1EF104Z	J	0.1 25V Ceramic	AA
C1102	VCKYCY1EF104Z	J	0.1 25V Ceramic	AA
C1103	VCKYCY1EF104Z	J	0.1 25V Ceramic	AA
C1104	VCEAPF1EW336M	J	33 25V Electrolytic	AB
C1105	VCKYCY1EF104Z	J	0.1 25V Ceramic	AA
C1106	VCKYCY1EF104Z	J	0.1 25V Ceramic	AA
C1107	VCKYCY1EF104Z	J	0.1 25V Ceramic	AA
C1108	VCKYCY1EF104Z	J	0.1 25V Ceramic	AA
C1110	VCKYCY1EF104Z	J	0.1 25V Ceramic	AA
C1111	VCKYCY1EF104Z	J	0.1 25V Ceramic	AA
C1112	VCKYCY1EF104Z	J	0.1 25V Ceramic	AA
C1113	VCKYCY1EF104Z	J	0.1 25V Ceramic	AA
C1115	VCEAPF1CW106M	J	10 16V Electrolytic	AB
C1116	VCEAPF1CW476M	J	47 16V Electrolytic	AC
C1117	VCEAPF1EW226M	J	22 25V Electrolytic	AB
C1128	VCKYCY1EF104Z	J	0.1 25V Ceramic	AA
C1129	VCEAPF1CW226M	J	22 16V Electrolytic	AB
C1130	VCKYCY1EF104Z	J	0.1 25V Ceramic	AA
C1131	VCKYCY1EF104Z	J	0.1 25V Ceramic	AA
C1132	VCEAPF0JW336M	J	33 6.3V Electrolytic	AB
C1133	VCKYCY1EF104Z	J	0.1 25V Ceramic	AA
C1135	VCKYCY1EF104Z	J	0.1 25V Ceramic	AA
C1140	RC-KZ0416CEZZ	J	10 25V Ceramic	AE
C1141	VCKYCY1EF104Z	J	0.1 25V Ceramic	AA
C1201	VCKYCY1EF104Z	J	0.1 25V Ceramic	AA
C1203	VCKYCY1EF104Z	J	0.1 25V Ceramic	AA
C1204	VCKYCY1EF104Z	J	0.1 25V Ceramic	AA
C1205	VCKYCY1EF104Z	J	0.1 25V Ceramic	AA
C1207	VCKYCY1EF104Z	J	0.1 25V Ceramic	AA
C1209	VCKYCY1EF104Z	J	0.1 25V Ceramic	AA
C1211	VCKYCY1EF104Z	J	0.1 25V Ceramic	AA
C1212	VCKYCY1EF104Z	J	0.1 25V Ceramic	AA
C1213	VCEAPF1EW336M	J	33 25V Electrolytic	AB
C1222	VCKYCY1EF104Z	J	0.1 25V Ceramic	AA
C1223	VCEAPF1CW226M	J	22 16V Electrolytic	AB
C1225	VCKYCY1EF104Z	J	0.1 25V Ceramic	AA
C1226	VCKYCY1EF104Z	J	0.1 25V Ceramic	AA
C1227	VCKYCY1EF104Z	J	0.1 25V Ceramic	AA
C1228	VCEAPF1CW106M	J	10 16V Electrolytic	AB
C1229	VCKYCY1EF104Z	J	0.1 25V Ceramic	AA
C1230	VCEAPF0JW336M	J	33 6.3V Electrolytic	AB
C1231	VCEAPF1EW226M	J	22 25V Electrolytic	AB
C1232	VCKYCY1EF104Z	J	0.1 25V Ceramic	AA
C1240	RC-KZ0416CEZZ	J	10 25V Ceramic	AE
C1241	VCKYCY1EF104Z	J	0.1 25V Ceramic	AA
C1257	VCKYCY1EF104Z	J	0.1 25V Ceramic	AA
C1301	VCKYCY1EF104Z	J	0.1 25V Ceramic	AA
C1302	VCKYCY1EF104Z	J	0.1 25V Ceramic	AA
C1303	VCEAPF1EW336M	J	33 25V Electrolytic	AB
C1304	VCKYCY1EF104Z	J	0.1 25V Ceramic	AA
C1305	VCKYCY1EF104Z	J	0.1 25V Ceramic	AA

DUNTKA339FE01/03
OUTPUT UNIT (Continued)

Ref. No.	Part No.	★	Description			Code
C1306	VCKYCY1EF104Z	J	0.1	25V	Ceramic	AA
C1307	VCKYCY1EF104Z	J	0.1	25V	Ceramic	AA
C1308	VCKYCY1EF104Z	J	0.1	25V	Ceramic	AA
C1309	VCKYCY1EF104Z	J	0.1	25V	Ceramic	AA
C1310	VCKYCY1EF104Z	J	0.1	25V	Ceramic	AA
C1311	VCKYCY1EF104Z	J	0.1	25V	Ceramic	AA
C1312	VCKYCY1EF104Z	J	0.1	25V	Ceramic	AA
C1314	VCKYCY1EF104Z	J	0.1	25V	Ceramic	AA
C1315	VCEAPF0JW336M	J	33	6.3V	Electrolytic	AB
C1316	VCEAPF1CW226M	J	22	16V	Electrolytic	AB
C1326	VCKYCY1EF104Z	J	0.1	25V	Ceramic	AA
C1327	VCKYCY1EF104Z	J	0.1	25V	Ceramic	AA
C1328	VCEAPF1CW106M	J	10	16V	Electrolytic	AB
C1329	VCKYCY1EF104Z	J	0.1	25V	Ceramic	AA
C1330	VCEAPF1EW226M	J	22	25V	Electrolytic	AB
C1332	VCKYCY1EF104Z	J	0.1	25V	Ceramic	AA
C1333	VCKYCY1EF104Z	J	0.1	25V	Ceramic	AA
C1336	VCKYCY1EF104Z	J	0.1	25V	Ceramic	AA
C1337	VCKYCY1EF104Z	J	0.1	25V	Ceramic	AA
C1340	RC-KZ0416CEZZ	J	10	25V	Ceramic	AE
C1341	VCKYCY1EF104Z	J	0.1	25V	Ceramic	AA
C1406	VCKYCY1EF104Z	J	0.1	25V	Ceramic	AA
C1407	VCKYCY1EF104Z	J	0.1	25V	Ceramic	AA
C1408	VCKYCY1EF104Z	J	0.1	25V	Ceramic	AA
C1409	VCKYCY1EF104Z	J	0.1	25V	Ceramic	AA
C1410	VCKYCY1EF104Z	J	0.1	25V	Ceramic	AA
C1411	VCEAPF0JW226M	J	22	6.3V	Electrolytic	AB
C1412	VCEAPF0JW226M	J	22	6.3V	Electrolytic	AB
C1414	VCKYCY1EF104Z	J	0.1	25V	Ceramic	AA
C1415	VCKYCY1EF104Z	J	0.1	25V	Ceramic	AA
C1416	VCKYCY1EF104Z	J	0.1	25V	Ceramic	AA
C1420	VCKYCY1EF104Z	J	0.1	25V	Ceramic	AA
C1422	VCKYCY1EF104Z	J	0.1	25V	Ceramic	AA
C1423	VCKYCY1EF104Z	J	0.1	25V	Ceramic	AA
C1425	VCKYCY1EF104Z	J	0.1	25V	Ceramic	AA
C1426	VCKYCY1EF104Z	J	0.1	25V	Ceramic	AA
C1427	VCKYCY1EF104Z	J	0.1	25V	Ceramic	AA
C1440	VCKYCY1EF104Z	J	0.1	25V	Ceramic	AA
C1441	VCKYCY1EF104Z	J	0.1	25V	Ceramic	AA
C1442	VCKYCY1EF104Z	J	0.1	25V	Ceramic	AA
C1443	VCKYCY1EF104Z	J	0.1	25V	Ceramic	AA
C1444	VCKYCY1EF104Z	J	0.1	25V	Ceramic	AA
C1445	VCKYCY1EF104Z	J	0.1	25V	Ceramic	AA
C1446	VCKYCY1EF104Z	J	0.1	25V	Ceramic	AA
C1447	VCKYCY1EF104Z	J	0.1	25V	Ceramic	AA
C1601	VCEAPJ0JW106M	J	10	6.3V	Electrolytic	AD
C1602	VCKYCY1EF104Z	J	0.1	25V	Ceramic	AA
C1603	VCKYCY1EF104Z	J	0.1	25V	Ceramic	AA
C1604	VCCCCY1HH220J	J	22p	50V	Ceramic	AA
C1605	VCCCCY1HH220J	J	22p	50V	Ceramic	AA
C1606	VCKYCY1EF104Z	J	0.1	25V	Ceramic	AA
C1607	VCKYCY1EF104Z	J	0.1	25V	Ceramic	AA
C1608	VCKYCY1EF104Z	J	0.1	25V	Ceramic	AA
C1609	VCEAPJ0JW106M	J	10	6.3V	Electrolytic	AD
C1610	VCKYCY1EF104Z	J	0.1	25V	Ceramic	AA
C1611	VCKYCY1EF104Z	J	0.1	25V	Ceramic	AA
C1612	VCKYCY1EF104Z	J	0.1	25V	Ceramic	AA
C1613	VCKYCY1EF104Z	J	0.1	25V	Ceramic	AA
C1614	VCEAPJ0JW106M	J	10	6.3V	Electrolytic	AD
C1615	VCKYCY1HB103K	J	0.01	50V	Ceramic	AA
C1616	VCKYCY1HB103K	J	0.01	50V	Ceramic	AA
C1617	VCEAPJ0JW106M	J	10	6.3V	Electrolytic	AD
C1618	VCKYCY1EF104Z	J	0.1	25V	Ceramic	AA
C1619	VCKYCY1EF104Z	J	0.1	25V	Ceramic	AA
C1620	VCKYCY1EF104Z	J	0.1	25V	Ceramic	AA
C1622	VCKYCY1EF104Z	J	0.1	25V	Ceramic	AA
C1623	VCKYCY1EF104Z	J	0.1	25V	Ceramic	AA
C1624	VCEAPJ0JW106M	J	10	6.3V	Electrolytic	AD
C1625	VCEAPJ0JW106M	J	10	6.3V	Electrolytic	AD
C1626	VCKYCY1EF104Z	J	0.1	25V	Ceramic	AA
C1628	VCKYCY1EF104Z	J	0.1	25V	Ceramic	AA
C1629	VCKYCY1EF104Z	J	0.1	25V	Ceramic	AA
C1701	VCEAPF1EW336M	J	33	25V	Electrolytic	AB
C1702	VCKYCY1EF104Z	J	0.1	25V	Ceramic	AA
C1704	VCEAPF1EW336M	J	33	25V	Electrolytic	AB
C1705	VCEAPF1CW476M	J	47	16V	Electrolytic	AC
C1706	VCEAPF1EW336M	J	33	25V	Electrolytic	AB
C1707	VCEAPF1CW476M	J	47	16V	Electrolytic	AC
C1708	VCKYCY1EF104Z	J	0.1	25V	Ceramic	AA
C1709	VCEAPF1EW336M	J	33	25V	Electrolytic	AB
C1710	VCKYCY1EF104Z	J	0.1	25V	Ceramic	AA
C1712	VCKYCY1EF104Z	J	0.1	25V	Ceramic	AA
C1713	VCEAPF1EW336M	J	33	25V	Electrolytic	AB
C1714	VCEAPF0JW107M	J	100	6.3V	Electrolytic	AC
C1715	VCEAPF1CW476M	J	47	16V	Electrolytic	AC
C1716	VCKYCY1EF104Z	J	0.1	25V	Ceramic	AA
C1717	VCKYCY1EF104Z	J	0.1	25V	Ceramic	AA
C1718	VCEAPF1EW226M	J	22	25V	Electrolytic	AB
C1719	VCEAPF0JW107M	J	100	6.3V	Electrolytic	AC
C1720	VCKYCY1EF104Z	J	0.1	25V	Ceramic	AA
C1721	VCKYCY1EF104Z	J	0.1	25V	Ceramic	AA
C1722	VCEAPF1EW336M	J	33	25V	Electrolytic	AB
C1723	VCKYCY1EF104Z	J	0.1	25V	Ceramic	AA
C1724	VCEAPF1EW336M	J	33	25V	Electrolytic	AB
C1725	VCKYCY1EF104Z	J	0.1	25V	Ceramic	AA
C1726	VCEAPF0JW107M	J	100	6.3V	Electrolytic	AC
C1727	VCKYCY1EF104Z	J	0.1	25V	Ceramic	AA
C1728	VCEAPF1EW336M	J	33	25V	Electrolytic	AB
C1729	VCEAPF1CW336M	J	33	16V	Electrolytic	AB
C1731	VCEAPF0JW226M	J	22	6.3V	Electrolytic	AB
C1732	VCEAPF1EW336M	J	33	25V	Electrolytic	AB
C1733	VCKYCY1EF104Z	J	0.1	25V	Ceramic	AA
C1734	VCEAPF1EW226M	J	22	25V	Electrolytic	AB
C1736	VCKYCY1EF104Z	J	0.1	25V	Ceramic	AA
C1737	VCKYCY1HB103K	J	0.01	50V	Ceramic	AA
C1738	VCKYCY1EF104Z	J	0.1	25V	Ceramic	AA
C1739	VCKYCY1EF104Z	J	0.1	25V	Ceramic	AA
C1740	VCKYCY1EF104Z	J	0.1	25V	Ceramic	AA
C1741	VCEAPF1EW226M	J	22	25V	Electrolytic	AB
C1742	VCKYCY1EF104Z	J	0.1	25V	Ceramic	AA
C1743	VCEAPF1EW226M	J	22	25V	Electrolytic	AB
C1744	VCEAPF1EW226M	J	22	25V	Electrolytic	AB
C1746	VCEAPF0JW107M	J	100	6.3V	Electrolytic	AC
C1747	VCKYCY1EF104Z	J	0.1	25V	Ceramic	AA
C1748	VCKYCY1EF104Z	J	0.1	25V	Ceramic	AA
C1749	VCKYCY1EF104Z	J	0.1	25V	Ceramic	AA
C1750	VCKYCY1EF104Z	J	0.1	25V	Ceramic	AA
C1751	VCKYCY1EF104Z	J	0.1	25V	Ceramic	AA
C1901	RC-KZ0416CEZZ	J	10	25V	Ceramic	AE
C1902	VCKYTQ1CB474K	J	0.47	16V	Ceramic	AD
C1903	RC-KZ0416CEZZ	J	10	25V	Ceramic	AE
C1904	VCCCCY1HH471J	J	470p	50V	Ceramic	AA
C1905	VCEAPF1CW107M	J	100	16V	Electrolytic	AD
C1906	VCKYCY1EF104Z	J	0.1	25V	Ceramic	AA
C1907	RC-KZ0416CEZZ	J	10	25V	Ceramic	AE
C1908	VCKYCY1EF104Z	J	0.1	25V	Ceramic	AA
C1909	VCEAPF1CW107M	J	100	16V	Electrolytic	AD

RESISTORS

Ref. No.	Part No.	★	Description			Code
R1101	VRS-CY1JF154J	J	150k	1/16W	Metal Oxide	AA
R1102	VRS-CY1JF103J	J	10k	1/16W	Metal Oxide	AA
R1103	VRS-CY1JF000J	J	0	1/16W	Metal Oxide	AA
R1105	VRS-CY1JF000J	J	0	1/16W	Metal Oxide	AA
R1106	VRS-CY1JF102J	J	1.0k	1/16W	Metal Oxide	AA
R1107	VRS-CY1JF560J	J	56	1/16W	Metal Oxide	AA
R1108	VRS-CY1JF560J	J	56	1/16W	Metal Oxide	AA
R1109	VRS-CY1JF000J	J	0	1/16W	Metal Oxide	AA
R1110	VRS-CY1JF103J	J	10k	1/16W	Metal Oxide	AA
R1113	VRS-CY1JF000J	J	0	1/16W	Metal Oxide	AA
R1114	VRS-CY1JF000J	J	0	1/16W	Metal Oxide	AA
R1115	VRS-CY1JF000J	J	0	1/16W	Metal Oxide	AA
R1116	VRS-TV1JD270J	J	27	1/16W	Metal Oxide	AA
R1118	VRS-CY1JF272J	J	2.7k	1/16W	Metal Oxide	AA
R1119	VRS-CY1JF470J	J	47	1/16W	Metal Oxide	AA
R1120	VRS-CY1JF222J	J	2.2k	1/16W	Metal Oxide	AA
R1121	VRS-CY1JF101J	J	100	1/16W	Metal Oxide	AA

DUNTKA339FE01/03
OUTPUT UNIT (Continued)

Ref. No.	Part No.	★		Description	Code
R1122	VRS-CY1JF123J	J	12k	1/16W Metal Oxide	AA
R1123	VRS-CY1JF184J	J	180k	1/16W Metal Oxide	AA
R1124	VRS-CY1JF103J	J	10k	1/16W Metal Oxide	AA
R1125	VRS-CY1JF273J	J	27k	1/16W Metal Oxide	AA
R1126	VRS-CY1JF223J	J	22k	1/16W Metal Oxide	AA
R1128	VRS-CY1JF000J	J	0	1/16W Metal Oxide	AA
R1129	VRS-CY1JF103J	J	10k	1/16W Metal Oxide	AA
R1130	VRS-CY1JF101J	J	100	1/16W Metal Oxide	AA
R1131	VRS-CY1JF000J	J	0	1/16W Metal Oxide	AA
R1134	VRS-CY1JF222J	J	2.2k	1/16W Metal Oxide	AA
R1135	VRS-CY1JF222J	J	2.2k	1/16W Metal Oxide	AA
R1136	VRS-CY1JF3R3J	J	3.3	1/16W Metal Oxide	AA
R1137	VRS-CY1JF3R3J	J	3.3	1/16W Metal Oxide	AA
R1138	VRS-CB1JF100J	J	10	1/16W Metal Oxide	AA
R1139	VRS-CB1JF100J	J	10	1/16W Metal Oxide	AA
R1143	VRS-CY1JF100J	J	10	1/16W Metal Oxide	AA
R1145	VRS-CY1JF000J	J	0	1/16W Metal Oxide	AA
R1146	VRS-CY1JF101J	J	100	1/16W Metal Oxide	AA
R1147	VRS-CY1JF000J	J	0	1/16W Metal Oxide	AA
R1148	VRS-CY1JF102J	J	1.0k	1/16W Metal Oxide	AA
R1149	VRS-CY1JF000J	J	0	1/16W Metal Oxide	AA
R1153	VRS-CY1JF101J	J	100	1/16W Metal Oxide	AA
R1155	VRS-CY1JF000J	J	0	1/16W Metal Oxide	AA
R1161	VRS-CY1JF222J	J	2.2k	1/16W Metal Oxide	AA
R1162	VRS-CY1JF3R3J	J	3.3	1/16W Metal Oxide	AA
R1163	VRS-CY1JF222J	J	2.2k	1/16W Metal Oxide	AA
R1166	VRS-CY1JF2R2J	J	2.2	1/16W Metal Oxide	AA
R1167	VRS-CY1JF2R2J	J	2.2	1/16W Metal Oxide	AA
R1168	VRS-CY1JF101J	J	100	1/16W Metal Oxide	AA
R1169	VRS-CY1JF3R3J	J	3.3	1/16W Metal Oxide	AA
R1170	VRS-CY1JF100J	J	10	1/16W Metal Oxide	AA
R1171	VRS-CY1JF100J	J	10	1/16W Metal Oxide	AA
R1177	VRS-CY1JF101J	J	100	1/16W Metal Oxide	AA
R1201	VRS-CY1JF000J	J	0	1/16W Metal Oxide	AA
R1205	VRS-CY1JF102J	J	1.0k	1/16W Metal Oxide	AA
R1206	VRS-CY1JF000J	J	0	1/16W Metal Oxide	AA
R1207	VRS-CY1JF101J	J	100	1/16W Metal Oxide	AA
R1210	VRS-CY1JF103J	J	10k	1/16W Metal Oxide	AA
R1211	VRS-CY1JF123J	J	12k	1/16W Metal Oxide	AA
R1212	VRS-CY1JF103J	J	10k	1/16W Metal Oxide	AA
R1213	VRS-CY1JF154J	J	150k	1/16W Metal Oxide	AA
R1214	VRS-CY1JF103J	J	10k	1/16W Metal Oxide	AA
R1215	VRS-CY1JF000J	J	0	1/16W Metal Oxide	AA
R1216	VRS-CY1JF000J	J	0	1/16W Metal Oxide	AA
R1217	VRS-CY1JF101J	J	100	1/16W Metal Oxide	AA
R1221	VRS-CY1JF222J	J	2.2k	1/16W Metal Oxide	AA
R1222	VRS-CY1JF222J	J	2.2k	1/16W Metal Oxide	AA
R1223	VRS-CY1JF3R3J	J	3.3	1/16W Metal Oxide	AA
R1224	VRS-CY1JF3R3J	J	3.3	1/16W Metal Oxide	AA
R1225	VRS-CB1JF100J	J	10	1/16W Metal Oxide	AA
R1226	VRS-CB1JF100J	J	10	1/16W Metal Oxide	AA
R1228	VRS-CY1JF000J	J	0	1/16W Metal Oxide	AA
R1229	VRS-CY1JF101J	J	100	1/16W Metal Oxide	AA
R1230	VRS-CY1JF000J	J	0	1/16W Metal Oxide	AA
R1232	VRS-CY1JF100J	J	10	1/16W Metal Oxide	AA
R1234	VRS-CY1JF470J	J	47	1/16W Metal Oxide	AA
R1235	VRS-CY1JF101J	J	100	1/16W Metal Oxide	AA
R1236	VRS-CY1JF000J	J	0	1/16W Metal Oxide	AA
R1238	VRS-CY1JF102J	J	1.0k	1/16W Metal Oxide	AA
R1239	VRS-CY1JF103J	J	10k	1/16W Metal Oxide	AA
R1240	VRS-CY1JF101J	J	100	1/16W Metal Oxide	AA
R1241	VRS-CY1JF000J	J	0	1/16W Metal Oxide	AA
R1242	VRS-CY1JF102J	J	1.0k	1/16W Metal Oxide	AA
R1243	VRS-CY1JF000J	J	0	1/16W Metal Oxide	AA
R1253	VRS-CY1JF000J	J	0	1/16W Metal Oxide	AA
R1254	VRS-CY1JF3R3J	J	3.3	1/16W Metal Oxide	AA
R1255	VRS-CY1JF101J	J	100	1/16W Metal Oxide	AA
R1256	VRS-CY1JF222J	J	2.2k	1/16W Metal Oxide	AA
R1257	VRS-CY1JF3R3J	J	3.3	1/16W Metal Oxide	AA
R1258	VRS-CY1JF2R2J	J	2.2	1/16W Metal Oxide	AA
R1259	VRS-CY1JF2R2J	J	2.2	1/16W Metal Oxide	AA
R1260	VRS-CY1JF222J	J	2.2k	1/16W Metal Oxide	AA
R1261	VRS-CY1JF100J	J	10	1/16W Metal Oxide	AA
R1262	VRS-CY1JF100J	J	10	1/16W Metal Oxide	AA
R1267	VRS-CY1JF000J	J	0	1/16W Metal Oxide	AA
R1272	VRS-CY1JF101J	J	100	1/16W Metal Oxide	AA
R1303	VRS-CY1JF000J	J	0	1/16W Metal Oxide	AA
R1305	VRS-CY1JF101J	J	100	1/16W Metal Oxide	AA
R1307	VRS-CY1JF560J	J	56	1/16W Metal Oxide	AA
R1308	VRS-CY1JF560J	J	56	1/16W Metal Oxide	AA
R1309	VRS-CY1JF102J	J	1.0k	1/16W Metal Oxide	AA
R1310	VRS-CY1JF000J	J	0	1/16W Metal Oxide	AA
R1311	VRS-CY1JF101J	J	100	1/16W Metal Oxide	AA
R1312	VRS-CY1JF103J	J	10k	1/16W Metal Oxide	AA
R1321	VRS-CY1JF272J	J	2.7k	1/16W Metal Oxide	AA
R1322	VRS-CY1JF101J	J	100	1/16W Metal Oxide	AA
R1323	VRS-TV1JD270J	J	27	1/16W Metal Oxide	AA
R1325	VRS-CY1JF222J	J	2.2k	1/16W Metal Oxide	AA
R1326	VRS-CY1JF103J	J	10k	1/16W Metal Oxide	AA
R1327	VRS-CY1JF000J	J	0	1/16W Metal Oxide	AA
R1329	VRS-CB1JF100J	J	10	1/16W Metal Oxide	AA
R1330	VRS-CB1JF100J	J	10	1/16W Metal Oxide	AA
R1333	VRS-CY1JF222J	J	2.2k	1/16W Metal Oxide	AA
R1334	VRS-CY1JF222J	J	2.2k	1/16W Metal Oxide	AA
R1335	VRS-CY1JF3R3J	J	3.3	1/16W Metal Oxide	AA
R1336	VRS-CY1JF3R3J	J	3.3	1/16W Metal Oxide	AA
R1338	VRS-CY1JF000J	J	0	1/16W Metal Oxide	AA
R1339	VRS-CY1JF000J	J	0	1/16W Metal Oxide	AA
R1341	VRS-CY1JF101J	J	100	1/16W Metal Oxide	AA
R1343	VRS-CY1JF123J	J	12k	1/16W Metal Oxide	AA
R1344	VRS-CY1JF103J	J	10k	1/16W Metal Oxide	AA
R1345	VRS-CY1JF000J	J	0	1/16W Metal Oxide	AA
R1346	VRS-CY1JF154J	J	150k	1/16W Metal Oxide	AA
R1347	VRS-CY1JF103J	J	10k	1/16W Metal Oxide	AA
R1350	VRS-CY1JF100J	J	10	1/16W Metal Oxide	AA
R1351	VRS-CY1JF470J	J	47	1/16W Metal Oxide	AA
R1352	VRS-CY1JF101J	J	100	1/16W Metal Oxide	AA
R1353	VRS-CY1JF000J	J	0	1/16W Metal Oxide	AA
R1354	VRS-CY1JF000J	J	0	1/16W Metal Oxide	AA
R1355	VRS-CY1JF102J	J	1.0k	1/16W Metal Oxide	AA
R1356	VRS-CY1JF000J	J	0	1/16W Metal Oxide	AA
R1361	VRS-CY1JF000J	J	0	1/16W Metal Oxide	AA
R1367	VRS-CY1JF000J	J	0	1/16W Metal Oxide	AA
R1368	VRS-CY1JF101J	J	100	1/16W Metal Oxide	AA
R1369	VRS-CY1JF222J	J	2.2k	1/16W Metal Oxide	AA
R1370	VRS-CY1JF3R3J	J	3.3	1/16W Metal Oxide	AA
R1372	VRS-CY1JF2R2J	J	2.2	1/16W Metal Oxide	AA
R1373	VRS-CY1JF2R2J	J	2.2	1/16W Metal Oxide	AA
R1374	VRS-CY1JF222J	J	2.2k	1/16W Metal Oxide	AA
R1375	VRS-CY1JF100J	J	10	1/16W Metal Oxide	AA
R1376	VRS-CY1JF100J	J	10	1/16W Metal Oxide	AA
R1378	VRS-CY1JF3R3J	J	3.3	1/16W Metal Oxide	AA
R1381	VRS-CY1JF101J	J	100	1/16W Metal Oxide	AA
R1401	VRS-CY1JF000J	J	0	1/16W Metal Oxide	AA
R1402	VRS-CY1JF000J	J	0	1/16W Metal Oxide	AA
R1403	VRS-CY1JF000J	J	0	1/16W Metal Oxide	AA
R1407	VRS-CY1JF103J	J	10k	1/16W Metal Oxide	AA
R1408	VRS-CY1JF103J	J	10k	1/16W Metal Oxide	AA
R1409	VRS-CY1JF101J	J	100	1/16W Metal Oxide	AA
R1410	VRS-CY1JF101J	J	100	1/16W Metal Oxide	AA
R1411	VRS-CY1JF272J	J	2.7k	1/16W Metal Oxide	AA
R1412	VRS-CY1JF332J	J	3.3k	1/16W Metal Oxide	AA
R1413	VRS-CY1JF103J	J	10k	1/16W Metal Oxide	AA
R1414	VRS-CY1JF472J	J	4.7k	1/16W Metal Oxide	AA
R1415	VRS-CY1JF103J	J	10k	1/16W Metal Oxide	AA
R1419	VRS-CA1JF101J	J	100	1/16W Metal Oxide	AA
R1420	VRS-CY1JF000J	J	0	1/16W Metal Oxide	AA
R1422	VRS-CA1JF101J	J	100	1/16W Metal Oxide	AA
R1423	VRS-CY1JF000J	J	0	1/16W Metal Oxide	AA
R1424	VRS-CY1JF100J	J	10	1/16W Metal Oxide	AA
R1426	VRS-CY1JF562J	J	5.6k	1/16W Metal Oxide	AA
R1430	VRS-CY1JF102J	J	1.0k	1/16W Metal Oxide	AA
R1431	VRS-CY1JF472J	J	4.7k	1/16W Metal Oxide	AA
R1432	VRS-CY1JF102J	J	1.0k	1/16W Metal Oxide	AA
R1433	VRS-CY1JF472J	J	4.7k	1/16W Metal Oxide	AA
R1434	VRS-TV1JD221J	J	220	1/16W Metal Oxide	AA

DUNTKA339FE01/03
OUTPUT UNIT (Continued)

Ref. No.	Part No.	★		Description	Code
R1435	VRS-TV1JD680J	J	68	1/16W Metal Oxide	AA
R1436	VRS-TV1JD221J	J	220	1/16W Metal Oxide	AA
R1437	VRS-TV1JD680J	J	68	1/16W Metal Oxide	AA
R1440	VRS-CY1JF100J	J	10	1/16W Metal Oxide	AA
R1441	VRS-CY1JF100J	J	10	1/16W Metal Oxide	AA
R1442	VRS-CY1JF100J	J	10	1/16W Metal Oxide	AA
R1443	VRS-CY1JF100J	J	10	1/16W Metal Oxide	AA
R1444	VRS-CY1JF100J	J	10	1/16W Metal Oxide	AA
R1445	VRS-CY1JF100J	J	10	1/16W Metal Oxide	AA
R1446	VRS-CY1JF100J	J	10	1/16W Metal Oxide	AA
R1447	VRS-CY1JF100J	J	10	1/16W Metal Oxide	AA
R1448	VRS-CY1JF100J	J	10	1/16W Metal Oxide	AA
R1449	VRS-CY1JF100J	J	10	1/16W Metal Oxide	AA
R1450	VRS-CY1JF100J	J	10	1/16W Metal Oxide	AA
R1451	VRS-CY1JF100J	J	10	1/16W Metal Oxide	AA
R1452	VRS-CY1JF100J	J	10	1/16W Metal Oxide	AA
R1456	VRS-CY1JF102J	J	1.0k	1/16W Metal Oxide	AA
R1457	VRS-CY1JF102J	J	1.0k	1/16W Metal Oxide	AA
R1458	VRS-CY1JF102J	J	1.0k	1/16W Metal Oxide	AA
R1459	VRS-CY1JF100J	J	10	1/16W Metal Oxide	AA
R1460	VRS-CY1JF100J	J	10	1/16W Metal Oxide	AA
R1461	VRS-CY1JF100J	J	10	1/16W Metal Oxide	AA
R1466	VRS-CY1JF101J	J	100	1/16W Metal Oxide	AA
R1467	VRS-CY1JF101J	J	100	1/16W Metal Oxide	AA
R1468	VRS-CY1JF101J	J	100	1/16W Metal Oxide	AA
R1474	VRS-CY1JF101J	J	100	1/16W Metal Oxide	AA
R1475	VRS-CY1JF101J	J	100	1/16W Metal Oxide	AA
R1476	VRS-CY1JF101J	J	100	1/16W Metal Oxide	AA
R1478	VRS-CY1JF101J	J	100	1/16W Metal Oxide	AA
R1479	VRS-CY1JF101J	J	100	1/16W Metal Oxide	AA
R1480	VRS-CY1JF102J	J	1.0k	1/16W Metal Oxide	AA
R1481	VRS-CY1JF102J	J	1.0k	1/16W Metal Oxide	AA
R1482	VRS-CY1JF102J	J	1.0k	1/16W Metal Oxide	AA
R1484	VRS-CY1JF101J	J	100	1/16W Metal Oxide	AA
R1485	VRS-CY1JF101J	J	100	1/16W Metal Oxide	AA
R1486	VRS-CY1JF101J	J	100	1/16W Metal Oxide	AA
R1487	VRS-CY1JF102J	J	1.0k	1/16W Metal Oxide	AA
R1488	VRS-CY1JF102J	J	1.0k	1/16W Metal Oxide	AA
R1489	VRN-CY1JF103D	J	10k	1/16W Metal Film	AA
R1490	VRS-CY1JF101J	J	100	1/16W Metal Oxide	AA
R1491	VRS-CY1JF101J	J	100	1/16W Metal Oxide	AA
R1501	VRS-CY1JF104J	J	100k	1/16W Metal Oxide	AA
R1502	VRS-CY1JF104J	J	100k	1/16W Metal Oxide	AA
R1503	VRS-CY1JF104J	J	100k	1/16W Metal Oxide	AA
R1504	VRS-CY1JF273J	J	27k	1/16W Metal Oxide	AA
R1505	VRS-CY1JF273J	J	27k	1/16W Metal Oxide	AA
R1506	VRS-CY1JF273J	J	27k	1/16W Metal Oxide	AA
R1510	VRS-CY1JF223J	J	22k	1/16W Metal Oxide	AA
R1511	VRS-CY1JF223J	J	22k	1/16W Metal Oxide	AA
R1515	VRS-CY1JF333J	J	33k	1/16W Metal Oxide	AA
R1516	VRS-CY1JF333J	J	33k	1/16W Metal Oxide	AA
R1519	VRS-CY1JF223J	J	22k	1/16W Metal Oxide	AA
R1520	VRS-CY1JF333J	J	33k	1/16W Metal Oxide	AA
R1601	VRS-CY1JF104J	J	100k	1/16W Metal Oxide	AA
R1602	VRS-CY1JF100J	J	10	1/16W Metal Oxide	AA
R1603	VRS-CY1JF100J	J	10	1/16W Metal Oxide	AA
R1604	VRS-CY1JF103J	J	10k	1/16W Metal Oxide	AA
R1605	VRS-CY1JF101J	J	100	1/16W Metal Oxide	AA
R1607	VRS-CY1JF101J	J	100	1/16W Metal Oxide	AA
R1608	VRS-CY1JF100J	J	10	1/16W Metal Oxide	AA
R1609	VRS-CY1JF100J	J	10	1/16W Metal Oxide	AA
R1610	VRS-CB1JF100J	J	10	1/16W Metal Oxide	AA
R1611	VRS-CA1JF104J	J	100k	1/16W Metal Oxide	AA
R1612	VRS-CA1JF103J	J	10k	1/16W Metal Oxide	AA
R1614	VRS-CA1JF102J	J	1.0k	1/16W Metal Oxide	AA
R1615	VRS-CB1JF104J	J	100k	1/16W Metal Oxide	AA
R1616	VRS-CY1JF100J	J	10	1/16W Metal Oxide	AA
R1617	VRS-CY1JF104J	J	100k	1/16W Metal Oxide	AA
R1618	VRS-CY1JF103J	J	10k	1/16W Metal Oxide	AA
R1619	VRS-CY1JF104J	J	100k	1/16W Metal Oxide	AA
R1620	VRS-CY1JF101J	J	100	1/16W Metal Oxide	AA
R1621	VRS-CY1JF101J	J	100	1/16W Metal Oxide	AA
R1622	VRS-CY1JF102J	J	1.0k	1/16W Metal Oxide	AA
R1623	VRS-CY1JF100J	J	10	1/16W Metal Oxide	AA
R1624	VRS-CY1JF101J	J	100	1/16W Metal Oxide	AA
R1625	VRS-CY1JF104J	J	100k	1/16W Metal Oxide	AA
R1626	VRS-CY1JF103J	J	10k	1/16W Metal Oxide	AA
R1628	VRS-CY1JF182J	J	1.8k	1/16W Metal Oxide	AA
R1629	VRS-CY1JF332J	J	3.3k	1/16W Metal Oxide	AA
R1630	VRS-CY1JF104J	J	100k	1/16W Metal Oxide	AA
R1631	VRS-CY1JF182J	J	1.8k	1/16W Metal Oxide	AA
R1632	VRS-CY1JF100J	J	10	1/16W Metal Oxide	AA
R1634	VRS-CA1JF101J	J	100	1/16W Metal Oxide	AA
R1635	VRS-CY1JF103J	J	10k	1/16W Metal Oxide	AA
R1636	VRS-CY1JF332J	J	3.3k	1/16W Metal Oxide	AA
R1637	VRS-CY1JF101J	J	100	1/16W Metal Oxide	AA
R1638	VRS-CY1JF104J	J	100k	1/16W Metal Oxide	AA
R1639	VRS-CY1JF103J	J	10k	1/16W Metal Oxide	AA
R1640	VRS-CY1JF472J	J	4.7k	1/16W Metal Oxide	AA
R1641	VRS-CY1JF101J	J	100	1/16W Metal Oxide	AA
R1644	VRS-CY1JF104J	J	100k	1/16W Metal Oxide	AA
R1645	VRS-CY1JF103J	J	10k	1/16W Metal Oxide	AA
R1646	VRS-CY1JF152J	J	1.5k	1/16W Metal Oxide	AA
R1647	VRS-CY1JF101J	J	100	1/16W Metal Oxide	AA
R1648	VRS-CY1JF272J	J	2.7k	1/16W Metal Oxide	AA
R1649	VRS-CY1JF102J	J	1.0k	1/16W Metal Oxide	AA
R1650	VRS-CA1JF101J	J	100	1/16W Metal Oxide	AA
R1651	VRS-CY1JF103J	J	10k	1/16W Metal Oxide	AA
R1653	VRS-CA1JF101J	J	100	1/16W Metal Oxide	AA
R1654	VRS-CY1JF104J	J	100k	1/16W Metal Oxide	AA
R1655	VRS-CY1JF104J	J	100k	1/16W Metal Oxide	AA
R1657	VRS-CY1JF184J	J	180k	1/16W Metal Oxide	AA
R1658	VRN-CY1JF242D	J	2.4k	1/16W Metal Film	AB
R1660	VRN-CY1JF473D	J	47k	1/16W Metal Film	AB
R1661	VRS-CY1JF100J	J	10	1/16W Metal Oxide	AA
R1662	VRN-CY1JF273D	J	27k	1/16W Metal Film	AB
R1663	VRS-CY1JF101J	J	100	1/16W Metal Oxide	AA
R1666	VRN-CY1JF103D	J	10k	1/16W Metal Film	AA
R1670	VRS-TW2ED151J	J	150	1/4W Metal Oxide	AA
R1671	VRS-CB1JF101J	J	100	1/16W Metal Oxide	AA
R1672	VRS-TW2ED000J	J	0	1/4W Metal Oxide	AB
R1673	VRS-CY1JF101J	J	100	1/16W Metal Oxide	AA
R1676	VRS-CY1JF102J	J	1.0k	1/16W Metal Oxide	AA
R1677	VRS-CY1JF000J	J	0	1/16W Metal Oxide	AA
R1678	VRS-CY1JF103J	J	10k	1/16W Metal Oxide	AA
R1679	VRS-CY1JF103J	J	10k	1/16W Metal Oxide	AA
R1680	VRS-TW2ED181J	J	180	1/4W Metal Oxide	AA
R1681	VRS-CY1JF103J	J	10k	1/16W Metal Oxide	AA
R1682	VRS-TW2ED121J	J	120	1/4W Metal Oxide	AA
R1683	VRS-TW2ED151J	J	150	1/4W Metal Oxide	AA
R1684	VRS-TV1JD000J	J	0	1/16W Metal Oxide	AA
R1685	VRS-CY1JF103J	J	10k	1/16W Metal Oxide	AA
R1686	VRS-CY1JF102J	J	1.0k	1/16W Metal Oxide	AA
R1687	VRS-CY1JF103J	J	10k	1/16W Metal Oxide	AA
R1688	VRS-TW2ED151J	J	150	1/4W Metal Oxide	AA
R1689	VRS-CY1JF103J	J	10k	1/16W Metal Oxide	AA
R1696	VRS-CY1JF103J	J	10k	1/16W Metal Oxide	AA
R1697	VRS-CY1JF101J	J	100	1/16W Metal Oxide	AA
R1698	VRS-CY1JF103J	J	10k	1/16W Metal Oxide	AA
R1699	VRS-CY1JF103J	J	10k	1/16W Metal Oxide	AA
R1701	VRS-CY1JF103F	J	10k	1/16W Metal Oxide	AA
R1702	VRS-CY1JF103J	J	10k	1/16W Metal Oxide	AA
R1703	VRS-TX2HF000J	J	0	1/2W Metal Oxide	AA
R1706	VRS-CY1JF103F	J	10k	1/16W Metal Oxide	AA
R1707	VRS-CY1JF683F	J	68k	1/16W Metal Oxide	AA
R1708	VRS-CY1JF102F	J	1.0k	1/16W Metal Oxide	AA
R1710	VRS-CY1JF221F	J	220	1/16W Metal Oxide	AA
R1711	VRS-TX2HF000J	J	0	1/2W Metal Oxide	AA
R1712	VRS-TX2HF000J	J	0	1/2W Metal Oxide	AA
R1713	VRS-CY1JF102J	J	1.0k	1/16W Metal Oxide	AA
R1714	VRS-CY1JF103J	J	10k	1/16W Metal Oxide	AA
R1715	VRS-CY1JF103J	J	10k	1/16W Metal Oxide	AA
R1716	VRS-TX2HF000J	J	0	1/2W Metal Oxide	AA
R1717	VRS-CY1JF123F	J	12k	1/16W Metal Oxide	AA
R1718	VRS-CY1JF102F	J	1.0k	1/16W Metal Oxide	AA
R1721	VRS-TX2HF100J	J	10	1/2W Metal Oxide	AA

DUNTKA339FE01/03
OUTPUT UNIT (Continued)

Ref. No.	Part No.	★	Description	Code
R1722	VRS-TX2HF000J	J	0 1/2W Metal Oxide	AA
R1723	VRS-TX2HF000J	J	0 1/2W Metal Oxide	AA
R1724	VRS-TX2HF2R2J	J	2.2 1/2W Metal Oxide	AB
R1725	VRS-TX2HF2R2J	J	2.2 1/2W Metal Oxide	AB
R1727	VRS-CY1JF103J	J	10k 1/16W Metal Oxide	AA
R1728	VRS-TX2HF100J	J	10 1/2W Metal Oxide	AA
R1729	VRS-TX2HF2R2J	J	2.2 1/2W Metal Oxide	AB
R1730	VRS-TX2HF2R2J	J	2.2 1/2W Metal Oxide	AB
R1734	VRS-CY1JF103J	J	10k 1/16W Metal Oxide	AA
R1735	VRS-CY1JF102J	J	1.0k 1/16W Metal Oxide	AA
R1736	VRS-TX2HF2R2J	J	2.2 1/2W Metal Oxide	AB
R1737	VRS-TX2HF2R2J	J	2.2 1/2W Metal Oxide	AB
R1738	VRS-CY1JF822F	J	8.2k 1/16W Metal Oxide	AA
R1739	VRS-CY1JF823F	J	82k 1/16W Metal Oxide	AA
R1741	VRS-CY1JF102F	J	1.0k 1/16W Metal Oxide	AA
R1742	VRS-CY1JF183F	J	18k 1/16W Metal Oxide	AA
R1743	VRS-CY1JF103J	J	10k 1/16W Metal Oxide	AA
R1744	VRS-CY1JF102J	J	1.0k 1/16W Metal Oxide	AA
R1745	VRS-CY1JF103J	J	10k 1/16W Metal Oxide	AA
R1746	VRS-CY1JF562J	J	5.6k 1/16W Metal Oxide	AA
R1747	VRS-CY1JF103J	J	10k 1/16W Metal Oxide	AA
R1748	VRS-TV1JD000J	J	0 1/16W Metal Oxide	AA
R1749	VRS-CY1JF682J	J	6.8k 1/16W Metal Oxide	AA
R1750	VRS-TV1JD000J	J	0 1/16W Metal Oxide	AA
R1751	VRS-CY1JF103J	J	10k 1/16W Metal Oxide	AA
R1752	VRS-CY1JF183J	J	18k 1/16W Metal Oxide	AA
R1753	VRS-CY1JF101J	J	100 1/16W Metal Oxide	AA
R1754	VRN-CY1JF103D	J	10k 1/16W Metal Film	AA
R1758	VRS-CY1JF102J	J	1.0k 1/16W Metal Oxide	AA
R1759	VRS-CY1JF103J	J	10k 1/16W Metal Oxide	AA
R1761	VRS-CY1JF103J	J	10k 1/16W Metal Oxide	AA
R1763	VRS-CY1JF472J	J	4.7k 1/16W Metal Oxide	AA
R1764	VRS-CY1JF472J	J	4.7k 1/16W Metal Oxide	AA
R1765	VRN-CY1JF103D	J	10k 1/16W Metal Film	AA
R1766	VRS-CY1JF184J	J	180k 1/16W Metal Oxide	AA
R1767	VRN-CY1JF822D	J	8.2k 1/16W Metal Film	AB
R1768	VRS-CY1JF222J	J	2.2k 1/16W Metal Oxide	AA
R1769	VRS-CY1JF123F	J	12k 1/16W Metal Oxide	AA
R1770	VRS-CY1JF123F	J	12k 1/16W Metal Oxide	AA
R1771	VRS-CY1JF102F	J	1.0k 1/16W Metal Oxide	AA
R1773	VRS-CY1JF333F	J	33k 1/16W Metal Oxide	AA
R1774	VRS-CY1JF103J	J	10k 1/16W Metal Oxide	AA
R1775	VRS-CY1JF103J	J	10k 1/16W Metal Oxide	AA
R1776	VRS-CY1JF472J	J	4.7k 1/16W Metal Oxide	AA
R1777	VRS-CY1JF103J	J	10k 1/16W Metal Oxide	AA
R1778	VRS-TX2HF1R0J	J	1.0 1/2W Metal Oxide	AA
R1779	VRS-CY1JF123F	J	12k 1/16W Metal Oxide	AA
R1780	VRS-CY1JF102F	J	1.0k 1/16W Metal Oxide	AA
R1781	VRS-CY1JF510F	J	51 1/16W Metal Oxide	AA
R1782	VRS-CY1JF103J	J	10k 1/16W Metal Oxide	AA
R1783	VRS-TX2HF180J	J	18 1/2W Metal Oxide	AB
R1784	VRS-CY1JF103J	J	10k 1/16W Metal Oxide	AA
R1785	VRS-CY1JF622F	J	6.2k 1/16W Metal Oxide	AA
R1786	VRS-CY1JF102F	J	1.0k 1/16W Metal Oxide	AA
R1787	VRS-CY1JF472J	J	4.7k 1/16W Metal Oxide	AA
R1788	VRS-CY1JF102J	J	1.0k 1/16W Metal Oxide	AA
R1789	VRS-CY1JF103J	J	10k 1/16W Metal Oxide	AA
R1790	VRS-CY1JF103J	J	10k 1/16W Metal Oxide	AA
R1791	VRS-CY1JF183J	J	18k 1/16W Metal Oxide	AA
R1792	VRS-CY1JF102J	J	1.0k 1/16W Metal Oxide	AA
R1793	VRS-CY1JF103J	J	10k 1/16W Metal Oxide	AA
R1794	VRN-CY1JF101D	J	100 1/16W Metal Film	AB
R1798	VRS-TX2HF180J	J	18 1/2W Metal Oxide	AB
R1799	VRN-CY1JF102D	J	1.0k 1/16W Metal Film	AB
R1804	VRS-CY1JF103J	J	10k 1/16W Metal Oxide	AA
R1808	VRS-CY1JF103J	J	10k 1/16W Metal Oxide	AA
R1812	VRS-CY1JF103J	J	10k 1/16W Metal Oxide	AA
R1815	VRS-CY1JF000J	J	0 1/16W Metal Oxide	AA
R1816	VRS-CY1JF000J	J	0 1/16W Metal Oxide	AA
R1817	VRS-CY1JF000J	J	0 1/16W Metal Oxide	AA
R1818	VRS-CY1JF000J	J	0 1/16W Metal Oxide	AA
R1819	VRS-CY1JF103J	J	10k 1/16W Metal Oxide	AA
R1820	VRS-CY1JF103J	J	10k 1/16W Metal Oxide	AA
R1821	VRS-CY1JF104J	J	100k 1/16W Metal Oxide	AA
R1822	VRS-CY1JF104J	J	100k 1/16W Metal Oxide	AA
R1823	VRS-CY1JF103J	J	10k 1/16W Metal Oxide	AA
R1824	VRS-CY1JF103J	J	10k 1/16W Metal Oxide	AA
R1827	VRS-CY1JF000J	J	0 1/16W Metal Oxide	AA
R1828	VRS-CY1JF000J	J	0 1/16W Metal Oxide	AA
R1829	VRS-CY1JF104J	J	100k 1/16W Metal Oxide	AA
R1830	VRS-CY1JF473J	J	47k 1/16W Metal Oxide	AA
R1831	VRS-CY1JF473J	J	47k 1/16W Metal Oxide	AA
R1832	VRS-CY1JF473J	J	47k 1/16W Metal Oxide	AA
R1834	VRS-CY1JF101J	J	100 1/16W Metal Oxide	AA
R1836	VRS-CY1JF101J	J	100 1/16W Metal Oxide	AA
R1837	VRS-CY1JF101J	J	100 1/16W Metal Oxide	AA
R1840	VRS-CY1JF103J	J	10k 1/16W Metal Oxide	AA
R1841	VRS-CY1JF103J	J	10k 1/16W Metal Oxide	AA
R1842	VRS-CY1JF103J	J	10k 1/16W Metal Oxide	AA
R1843	VRS-CY1JF103J	J	10k 1/16W Metal Oxide	AA
R1902	VRS-CY1JF102J	J	1.0k 1/16W Metal Oxide	AA
R1903	VRS-CY1JF473J	J	47k 1/16W Metal Oxide	AA
R1905	VRS-TX2HF1R0J	J	1.0 1/2W Metal Oxide	AA
R1906	VRS-TX2HF1R0J	J	1.0 1/2W Metal Oxide	AA
R1907	VRS-CY1JF223J	J	22k 1/16W Metal Oxide	AA
R1909	VRS-CY1JF103J	J	10k 1/16W Metal Oxide	AA
R1910	VRS-CY1JF102J	J	1.0k 1/16W Metal Oxide	AA
R1911	VRS-CY1JF823J	J	82k 1/16W Metal Oxide	AA
R1912	VRS-CY1JF103J	J	10k 1/16W Metal Oxide	AA
R1913	VRS-TX2HF8R2J	J	8.2 1/2W Metal Oxide	AA
R1914	QFS-J2521CEZZ	J	Fuse Resistor	AF
R1915	VRS-CY1JF393J	J	39k 1/16W Metal Oxide	AA
R1916	VRS-CY1JF000J	J	0 1/16W Metal Oxide	AA
R1922	VRS-CY1JF103J	J	10k 1/16W Metal Oxide	AA
R1923	VRS-CY1JF000J	J	0 1/16W Metal Oxide	AA
R1928	VRS-CY1JF103J	J	10k 1/16W Metal Oxide	AA
R1929	VRS-CY1JF103J	J	10k 1/16W Metal Oxide	AA
R1930	VRS-CY1JF000J	J	0 1/16W Metal Oxide	AA
R1932	VRS-CY1JF103J	J	10k 1/16W Metal Oxide	AA
R1933	VRS-CY1JF000J	J	0 1/16W Metal Oxide	AA
R1934	VRS-CY1JF000J	J	0 1/16W Metal Oxide	AA
R1935	VRS-CY1JF000J	J	0 1/16W Metal Oxide	AA
R1936	VRS-CY1JF000J	J	0 1/16W Metal Oxide	AA
R1937	VRS-CY1JF000J	J	0 1/16W Metal Oxide	AA
R1938	VRS-CY1JF000J	J	0 1/16W Metal Oxide	AA

MISCELLANEOUS PARTS

Ref. No.	Part No.	★	Description	Code
FB1101	RBLN-0059CEZZ	J	Ferrite Bead	AB
FB1105	RBLN-0059CEZZ	J	Ferrite Bead	AB
FB1106	RBLN-0059CEZZ	J	Ferrite Bead	AB
FB1107	RBLN-0059CEZZ	J	Ferrite Bead	AB
FB1108	RBLN-0059CEZZ	J	Ferrite Bead	AB
FB1201	RBLN-0059CEZZ	J	Ferrite Bead	AB
FB1202	RBLN-0059CEZZ	J	Ferrite Bead	AB
FB1203	RBLN-0059CEZZ	J	Ferrite Bead	AB
FB1204	RBLN-0059CEZZ	J	Ferrite Bead	AB
FB1205	RBLN-0059CEZZ	J	Ferrite Bead	AB
FB1301	RBLN-0059CEZZ	J	Ferrite Bead	AB
FB1302	RBLN-0059CEZZ	J	Ferrite Bead	AB
FB1303	RBLN-0059CEZZ	J	Ferrite Bead	AB
FB1304	RBLN-0059CEZZ	J	Ferrite Bead	AB
FB1305	RBLN-0059CEZZ	J	Ferrite Bead	AB
FB1401	RBLN-0059CEZZ	J	Ferrite Bead	AB
FB1402	RBLN-0059CEZZ	J	Ferrite Bead	AB
FB1403	RBLN-0059CEZZ	J	Ferrite Bead	AB
FB1601	RBLN-0059CEZZ	J	Ferrite Bead	AB
FB1602	RBLN-0059CEZZ	J	Ferrite Bead	AB
FB1603	RBLN-0059CEZZ	J	Ferrite Bead	AB
FB1604	RBLN-0064TAZZ	J	Ferrite Bead	AC
FB1605	RBLN-0059CEZZ	J	Ferrite Bead	AB
FB1606	RBLN-0059CEZZ	J	Ferrite Bead	AB
FB1702	RBLN-0064TAZZ	J	Ferrite Bead	AC
FB1703	RBLN-0059CEZZ	J	Ferrite Bead	AB
FB1704	RBLN-0064TAZZ	J	Ferrite Bead	AC
FB1705	RBLN-0059CEZZ	J	Ferrite Bead	AB
FB1706	RBLN-0059CEZZ	J	Ferrite Bead	AB

DUNTKA339FE01/03
OUTPUT UNIT (Continued)

Ref. No.	Part No.	★	Description	Code
FB1707	RBLN-0064TAZZ	J	Ferrite Bead	AC
FB1708	RBLN-0064TAZZ	J	Ferrite Bead	AC
FB1709	RBLN-0064TAZZ	J	Ferrite Bead	AC
FB1710	RBLN-0064TAZZ	J	Ferrite Bead	AC
FB1711	RBLN-0064TAZZ	J	Ferrite Bead	AC
FB1712	RBLN-0059CEZZ	J	Ferrite Bead	AB
FB1713	RBLN-0059CEZZ	J	Ferrite Bead	AB
FB1717	RBLN-0059CEZZ	J	Ferrite Bead	AB
FB1718	RBLN-0059CEZZ	J	Ferrite Bead	AB
FB1719	RBLN-0064TAZZ	J	Ferrite Bead	AC
FB1720	RBLN-0059CEZZ	J	Ferrite Bead	AB
FB1721	RBLN-0064TAZZ	J	Ferrite Bead	AC
FB1722	RBLN-0064TAZZ	J	Ferrite Bead	AC
FB1901	RBLN-0064TAZZ	J	Ferrite Bead	AC
FB1902	RBLN-0064TAZZ	J	Ferrite Bead	AC
FB1903	RBLN-0064TAZZ	J	Ferrite Bead	AC
P1401	QPLGN0663TAZZ	J	Plug 6-Pin	AD
P1601	QPLGN0174FJZZ	J	Plug 2-Pin	AC
P1602	QPLGN0363TAZZ	J	Plug 3-Pin	AC
P1701	QPLGN0364TAZZ	J	Plug 3-Pin	AC
P1702	QPLGN0474TAZZ	J	Plug 4-Pin	AD
P1703	QPLGN0364TAZZ	J	Plug 3-Pin	AC
P1704	QPLGN0264TAZZ	J	Plug 2-Pin	AC
P1705	QPLGN0364TAZZ	J	Plug 3-Pin	AC
P1706	QPLGN0464TAZZ	J	Plug 4-Pin	AC
P1707	QPLGN0010CEZZ	J	Plug 10-Pin(EA)	AC
P1708	QPLGN0264TAZZ	J	Plug 2-Pin	AC
P1901	QPLGN0264TAZZ	J	Plug 2-Pin(SP)	AC
SC1101	QSOCN3271TAZZ	J	Socket 32-Pin	AE
SC1201	QSOCN3271TAZZ	J	Socket 32-Pin	AE
SC1301	QSOCN3271TAZZ	J	Socket 32-Pin	AE
SC1601	QSOCN1305TAN1	J	Socket 13-Pin	AF
SC1701	QCNCW0031CEZZ*	J	Socket 120-Pin	AM
SW1601	QSW-K0099TAZZ*	J	Key Switch	AC
SW1602	QSW-S0203TAZZ	J	Slide Switch	AD
W1701	MSPRP0221CEFW*	J	Spring	AC
W1702	MSPRP0221CEFW*	J	Spring	AC
W1703	MSPRP0221CEFW*	J	Spring	AC
W1704	MSPRP0221CEFW*	J	Spring	AC
W1705	MSPRP0221CEFW*	J	Spring	AC
	PSLDC0107CEZZ	J	Shield	AE

DUNTKA340DE01/03
INPUT UNIT

UNIT

Ref. No.	Part No.	★	Description	Code
UNT3701	RCNVD0014CEZZ	J	CD/DC Unit	BK

INTEGRATED CIRCUITS

Ref. No.	Part No.	★	Description	Code
IC3001	VHi24LC21//-1	J	24LC21T	AN
IC3002	VHiLT1399CS-1*	J		AU
IC3003	VHiLT1399CS-1*	J		AU
IC3004	RH-iX2317CEZZ	J	SN74AlS1034NS	AF
IC3005	VHiTL712CPW-1	J	TI712CPWR	AL
IC3006	VHiTL712CPW-1	J	TI712CPWR	AL
IC3008	VHiTL712CPW-1	J	TI712CPWR	AL
IC3010	VHi7WH157FK-1*	J		AF
IC3301	VHiNJM2233V-1	J	NJM2233V	AE
IC3302	VHiNJM2233V-1	J	NJM2233V	AE
IC3402	VHiM62320FP-1	J	M62320FP	AK
IC3403	VHiNJM2245M-1	J	NJM2245M	AF
IC3501	VHiTK15420/-1	J	TK15420MTl	AG
IC3502	VHiNJM2283V-1	J	NJM2283V	AG
IC3503	VHiPQ20VZ11-1	J	PQ20VZ11	AH
IC3601	VHiUPD4721G-1	J	UPD4721G-GIG	AQ
IC3602	VHiTC4W66U/-1	J	TC4W66FU	AF
IC3701	VHiPQ05TZ11-1	J	PQ05TZ11	AH
IC3702	VHiLM2663M+-1	J	LM2663MX	AS

TRANSISRORS

Ref. No.	Part No.	★	Description	Code
Q3301	VS2SC3928AR-1	J	2SC3928AR	AB
Q3302	VS2SA1530AR-1	J	2SA1530AR	AB
Q3502	VS2SA1530AR-1	J	2SA1530AR	AB
Q3504	VS2SA1530AR-1	J	2SA1530AR	AB
Q3506	VS2SA1530AR-1	J	2SA1530AR	AB
Q3507	VS2SA1530AR-1	J	2SA1530AR	AB
Q3508	VS2SC3928AR-1	J	2SC3928AR	AB
Q3509	VS2SA1530AR-1	J	2SA1530AR	AB
Q3510	VS2SC3928AR-1	J	2SC3928AR	AB
Q3601	VSDTC144EE/-1	J	DTC144EE	AA
Q3602	VSDTC144EE/-1	J	DTC144EE	AA
Q3603	VSDTC144EE/-1	J	DTC144EE	AA
Q3604	VSDTC144EE/-1	J	DTC144EE	AA
Q3703	VSDTC144EK/-1	J	DTC144EE	AB
Q3704	VSDTC144EK/-1	J	DTC144EE	AB

DIODES

Ref. No.	Part No.	★	Description	Code
D3002	RH-EX1247CEZZ*	J	Zener Diode	AB
D3003	RH-EX1247CEZZ*	J	Zener Diode	AB
D3004	VHDMA152WA/-1	J	Diode	AA
D3005	RH-EX1247CEZZ*	J	Zener Diode	AB
D3006	RH-EX1247CEZZ*	J	Zener Diode	AB
D3007	VHDMA152WA/-1	J	Diode	AA
D3008	RH-EX1247CEZZ*	J	Zener Diode	AB
D3011	VHDMA152WA/-1	J	Diode	AA
D3012	VHDMA152WA/-1	J	Diode	AA
D3014	RH-EX1247CEZZ*	J	Zener Diode	AB
D3015	RH-EX1247CEZZ*	J	Zener Diode	AB
D3016	RH-EX1247CEZZ*	J	Zener Diode	AB
D3017	VHDMA152WA/-1	J	Diode	AA
D3018	VHDMA152WA/-1	J	Diode	AA
D3020	VHDMA132WK/-1	J	Diode	AA
D3301	RH-EX1262CEZZ	J	Zener Diode	AB
D3302	RH-EX1262CEZZ	J	Zener Diode	AB
D3305	RH-EX1262CEZZ	J	Zener Diode	AB
D3306	RH-EX1262CEZZ	J	Zener Diode	AB
D3307	RH-EX1262CEZZ	J	Zener Diode	AB
D3308	RH-EX1262CEZZ	J	Zener Diode	AB
D3403	RH-EX1262CEZZ	J	Zener Diode	AB
D3405	RH-EX1262CEZZ	J	Zener Diode	AB
D3406	RH-EX1247CEZZ*	J	Zener Diode	AB
D3501	RH-EX1262CEZZ	J	Zener Diode	AB
D3502	RH-EX1262CEZZ	J	Zener Diode	AB
D3503	VHDDAN202K/-1	J	Diode	AB
D3602	VHDMA3120WA-1	J	Diode	AK
D3604	VHDMA3120WA-1	J	Diode	AK

DUNTKA340DE01/03
INPUT UNIT (Continued)

Ref. No.	Part No.	★	Description	Code
D3605	RH-EX1247CEZZ*	J	Zener Diode	AB
D3606	RH-EX1247CEZZ*	J	Zener Diode	AB
D3607	RH-EX1247CEZZ*	J	Zener Diode	AB
D3608	RH-EX1247CEZZ*	J	Zener Diode	AB
D3609	RH-EX1247CEZZ*	J	Zener Diode	AB
D3701	VHDDAN202K/-1	J	Diode	AB
D3702	RH-EX0516CEZZ	J	Zener Diode	AB
D3703	RH-EX0516CEZZ	J	Zener Diode	AB

FILTERS AND COILS

Ref. No.	Part No.	★	Description	Code
FL3001	RFiLN0003TAZZ	J	Filter	AD
FL3002	RFiLN0003TAZZ	J	Filter	AD
FL3003	RFiLN0003TAZZ	J	Filter	AD
FL3004	RFiLN0003TAZZ	J	Filter	AD
FL3005	RFiLN0003TAZZ	J	Filter	AD
FL3006	RFiLN0003TAZZ	J	Filter	AD
FL3401	RFiLN0003TAZZ	J	Filter	AD
FL3402	RFiLN0003TAZZ	J	Filter	AD
FL3403	RFiLN0003TAZZ	J	Filter	AD
FL3503	RCiLV0108GEZZ	J	Filter	AG
FL3504	RCiLF0306CEZZ	J	Filter	AH
L3004	VP-1M680J6R9N	J	Peaking 68µH	AC
L3005	VP-1M680J6R9N	J	Peaking 68µH	AC
L3501	VP-1M220J2R9N	J	Peaking 22µH	AC
L3701	VP-1M100J1R6N	J	Peaking 10µH	AC
L3702	VP-1M100J1R6N	J	Peaking 10µH	AC

CAPACITORS

Ref. No.	Part No.	★	Description			Code
C3001	VCKYCY1EF104Z	J	0.1	25V	Ceramic	AA
C3003	VCE9PF1CW106M	J	10	16V	Elect.(N.P)	AC
C3004	VCKYCY1HB103K	J	0.01	50V	Ceramic	AA
C3005	VCKYCY1HB103K	J	0.01	50V	Ceramic	AA
C3006	VCE9PF1CW106M	J	10	16V	Elect.(N.P)	AC
C3007	VCKYCY1EF104Z	J	0.1	25V	Ceramic	AA
C3009	VCKYCY1HB103K	J	0.01	50V	Ceramic	AA
C3010	VCE9PF1CW106M	J	10	16V	Elect.(N.P)	AC
C3011	VCKYCY1EF104Z	J	0.1	25V	Ceramic	AA
C3013	VCKYCY1HB103K	J	0.01	50V	Ceramic	AA
C3014	VCE9PF1CW106M	J	10	16V	Elect.(N.P)	AC
C3015	VCKYCY1HB103K	J	0.01	50V	Ceramic	AA
C3016	VCE9PF1CW106M	J	10	16V	Elect.(N.P)	AC
C3017	VCKYCY1HB103K	J	0.01	50V	Ceramic	AA
C3018	VCE9PF1CW106M	J	10	16V	Elect.(N.P)	AC
C3019	VCEAPF1CW226M	J	22	16V	Electrolytic	AB
C3020	VCKYCY1EF104Z	J	0.1	25V	Ceramic	AA
C3021	VCCCCY1HH330J	J	33p	50V	Ceramic	AA
C3022	VCKYCY1EF104Z	J	0.1	25V	Ceramic	AA
C3023	VCKYCY1EF104Z	J	0.1	25V	Ceramic	AA
C3024	VCKYCY1EF104Z	J	0.1	25V	Ceramic	AA
C3025	VCKYCY1EF104Z	J	0.1	25V	Ceramic	AA
C3026	VCKYCY1EF104Z	J	0.1	25V	Ceramic	AA
C3027	VCEAPF1CW226M	J	22	16V	Electrolytic	AB
C3029	VCCCCY1HH330J	J	33p	50V	Ceramic	AA
C3030	VCKYCY1EF104Z	J	0.1	25V	Ceramic	AA
C3032	VCKYCY1EF104Z	J	0.1	25V	Ceramic	AA
C3038	VCCCCY1HH330J	J	33p	50V	Ceramic	AA
C3039	VCKYCY1EF104Z	J	0.1	25V	Ceramic	AA
C3040	VCKYCY1EF104Z	J	0.1	25V	Ceramic	AA
C3303	VCCCCY1HH101J	J	100p	50V	Ceramic	AA
C3306	VCCCCY1HH101J	J	100p	50V	Ceramic	AA
C3307	VCCCCY1HH101J	J	100p	50V	Ceramic	AA
C3308	VCCCCY1HH101J	J	100p	50V	Ceramic	AA
C3309	VCCCCY1HH101J	J	100p	50V	Ceramic	AA
C3310	VCCCCY1HH101J	J	100p	50V	Ceramic	AA
C3311	VCEAPF1CW106M	J	10	16V	Electrolytic	AB
C3312	VCEAPF1CW106M	J	10	16V	Electrolytic	AB
C3313	VCEAPF1CW106M	J	10	16V	Electrolytic	AB
C3314	VCEAPF1CW106M	J	10	16V	Electrolytic	AB
C3315	VCKYCY1EF104Z	J	0.1	25V	Ceramic	AA
C3316	VCEAPF1CW106M	J	10	16V	Electrolytic	AB
C3317	VCEAPF1CW106M	J	10	16V	Electrolytic	AB
C3318	VCKYCY1EF104Z	J	0.1	25V	Ceramic	AA
C3319	VCKYCY1EF104Z	J	0.1	25V	Ceramic	AA
C3320	VCKYCY1EF104Z	J	0.1	25V	Ceramic	AA
C3408	VCKYCY1EF104Z	J	0.1	25V	Ceramic	AA
C3410	VCEAPF1CW106M	J	10	16V	Electrolytic	AB
C3411	VCEAPF1CW106M	J	10	16V	Electrolytic	AB
C3412	VCKYCY1EF104Z	J	0.1	25V	Ceramic	AA
C3413	VCKYCY1EF104Z	J	0.1	25V	Ceramic	AA
C3501	VCKYCY1HB103K	J	0.01	50V	Ceramic	AA
C3503	VCKYCY1EF104Z	J	0.1	25V	Ceramic	AA
C3505	VCKYCY1EF104Z	J	0.1	25V	Ceramic	AA
C3506	VCKYCY1HB103K	J	0.01	50V	Ceramic	AA
C3507	VCCCCY1HH120J	J	12p	50V	Ceramic	AA
C3509	VCKYCY1EF104Z	J	0.1	25V	Ceramic	AA
C3510	VCCCCY1HH6R0D	J	6.0p	50V	Ceramic	AA
C3512	VCCCCY1HH270J	J	27p	50V	Ceramic	AA
C3514	VCEAPF1CW106M	J	10	16V	Electrolytic	AB
C3517	VCEAPF1CW106M	J	10	16V	Electrolytic	AB
C3518	VCKYCY1EF104Z	J	0.1	25V	Ceramic	AA
C3520	VCEAPF0JW107M	J	100	6.3V	Electrolytic	AC
C3521	VCKYCY1EF104Z	J	0.1	25V	Ceramic	AA
C3522	VCKYCY1EF104Z	J	0.1	25V	Ceramic	AA
C3523	VCKYCY1EF104Z	J	0.1	25V	Ceramic	AA
C3524	VCEAPF1HW105M	J	1.0	50V	Electrolytic	AB
C3539	VCKYCY1EF104Z	J	0.1	25V	Ceramic	AA
C3540	VCEAPV1HW105M	J	1.0	50V	Electrolytic	AC
C3541	VCCCCY1HH471J	J	470p	50V	Ceramic	AA
C3560	VCCCCY1HH391J	J	390p	50V	Ceramic	AA
C3601	VCEAPF1HW225M	J	2.2	50V	Electrolytic	AB
C3602	VCEAPF1HW225M	J	2.2	50V	Electrolytic	AB
C3603	VCEAPF1HW225M	J	2.2	50V	Electrolytic	AB
C3604	VCEAPF1HW225M	J	2.2	50V	Electrolytic	AB
C3605	VCEAPF1HW225M	J	2.2	50V	Electrolytic	AB
C3606	VCKYCY1EF104Z	J	0.1	25V	Ceramic	AA
C3607	VCKYCY1EF104Z	J	0.1	25V	Ceramic	AA
C3701	VCKYCY1EF104Z	J	0.1	25V	Ceramic	AA
C3702	VCEAPF1CW107M	J	100	16V	Electrolytic	AD
C3703	VCKYCY1EF104Z	J	0.1	25V	Ceramic	AA
C3704	RC-KZ0416CEZZ	J	10	25V	Ceramic	AE
C3705	RC-KZ0416CEZZ	J	10	25V	Ceramic	AE
C3706	RC-KZ0416CEZZ	J	10	25V	Ceramic	AE
C3707	RC-KZ0416CEZZ	J	10	25V	Ceramic	AE
C3708	VCEAPF1CW106M	J	10	16V	Electrolytic	AB
C3710	VCEAPF0JW476M	J	47	6.3V	Electrolytic	AB
C3711	VCKYCY1EF104Z	J	0.1	25V	Ceramic	AA
C3712	VCEAPF1CW106M	J	10	16V	Electrolytic	AB
C3713	VCEAPF1CW106M	J	10	16V	Electrolytic	AB
C3714	VCEAPF1CW107M	J	100	16V	Electrolytic	AD
C3715	VCEAPF1CW107M	J	100	16V	Electrolytic	AD
C3716	VCKYCY1EF104Z	J	0.1	25V	Ceramic	AA
C3717	RC-EZ1151CEZZ*	J	47	20V	Electrolytic	AK
C3718	VCKYCY1EF104Z	J	0.1	25V	Ceramic	AA
C3719	VCKYCY1EF104Z	J	0.1	25V	Ceramic	AA
C3720	VCKYCY1EF104Z	J	0.1	25V	Ceramic	AA
C3721	RC-EZ1148CEZZ	J	56	6.3V	Electrolytic	AG
C3722	VCKYCY1EF104Z	J	0.1	25V	Ceramic	AA
C3723	RC-EZ1148CEZZ	J	56	6.3V	Electrolytic	AG
C3724	RC-KZ0416CEZZ	J	10	25V	Ceramic	AE
C3725	RC-KZ0416CEZZ	J	10	25V	Ceramic	AE

RESISTORS

Ref. No.	Part No.	★	Description			Code
R3003	VRS-TV1JD000J	J	0	1/16W	Metal Oxide	AA
R3004	VRS-TV1JD000J	J	0	1/16W	Metal Oxide	AA
R3006	VRS-TV1JD000J	J	0	1/16W	Metal Oxide	AA
R3007	VRS-TV1JD000J	J	0	1/16W	Metal Oxide	AA
R3008	VRS-TW2ED750J	J	75	1/4W	Metal Oxide	AA
R3009	VRS-TW2ED750J	J	75	1/4W	Metal Oxide	AA
R3010	VRS-TW2ED750J	J	75	1/4W	Metal Oxide	AA
R3011	VRS-CY1JF103J	J	10k	1/16W	Metal Oxide	AA
R3012	VRS-CY1JF102J	J	1.0k	1/16W	Metal Oxide	AA
R3013	VRS-CY1JF101J	J	100	1/16W	Metal Oxide	AA
R3014	VRS-CY1JF101J	J	100	1/16W	Metal Oxide	AA
R3015	VRS-CA1JF101J	J	100	1/16W	Metal Oxide	AA
R3016	VRS-CY1JF000J	J	0	1/16W	Metal Oxide	AA
R3017	VRS-CY1JF473J	J	47k	1/16W	Metal Oxide	AA

DUNTKA340DE01/03
INPUT UNIT (Continued)

Ref. No.	Part No.	★	Description		Code
R3018	VRS-CY1JF473J	J	47k	1/16W Metal Oxide	AA
R3019	VRS-TQ2BD750J	J	75	1/8W Metal Oxide	AA
R3020	VRS-TQ2BD750J	J	75	1/8W Metal Oxide	AA
R3021	VRS-CY1JF473J	J	47k	1/16W Metal Oxide	AA
R3022	VRS-CY1JF331J	J	330	1/16W Metal Oxide	AA
R3023	VRS-CY1JF331J	J	330	1/16W Metal Oxide	AA
R3024	VRS-CY1JF473J	J	47k	1/16W Metal Oxide	AA
R3025	VRS-CY1JF331J	J	330	1/16W Metal Oxide	AA
R3026	VRS-CY1JF331J	J	330	1/16W Metal Oxide	AA
R3027	VRS-CY1JF331J	J	330	1/16W Metal Oxide	AA
R3028	VRS-CY1JF331J	J	330	1/16W Metal Oxide	AA
R3029	VRS-TQ2BD750J	J	75	1/8W Metal Oxide	AA
R3031	VRS-CY1JF331J	J	330	1/16W Metal Oxide	AA
R3032	VRS-CY1JF681J	J	680	1/16W Metal Oxide	AA
R3033	VRS-CY1JF331J	J	330	1/16W Metal Oxide	AA
R3034	VRS-CY1JF681J	J	680	1/16W Metal Oxide	AA
R3035	VRS-CY1JF271J	J	270	1/16W Metal Oxide	AA
R3036	VRS-CY1JF473J	J	47k	1/16W Metal Oxide	AA
R3037	VRS-CY1JF102J	J	1.0k	1/16W Metal Oxide	AA
R3040	VRS-TW2ED330J	J	33	1/4W Metal Oxide	AA
R3041	VRS-CY1JF102J	J	1.0k	1/16W Metal Oxide	AA
R3042	VRS-CY1JF222J	J	2.2k	1/16W Metal Oxide	AA
R3045	VRS-TW2ED330J	J	33	1/4W Metal Oxide	AA
R3046	VRS-CY1JF473J	J	47k	1/16W Metal Oxide	AA
R3049	VRS-TW2ED330J	J	33	1/4W Metal Oxide	AA
R3050	VRS-CY1JF681J	J	680	1/16W Metal Oxide	AA
R3051	VRS-CY1JF473J	J	47k	1/16W Metal Oxide	AA
R3052	VRS-CY1JF331J	J	330	1/16W Metal Oxide	AA
R3056	VRS-CY1JF392J	J	3.9k	1/16W Metal Oxide	AA
R3059	VRS-CY1JF271J	J	270	1/16W Metal Oxide	AA
R3060	VRS-CY1JF101J	J	100	1/16W Metal Oxide	AA
R3061	VRS-CY1JF101J	J	100	1/16W Metal Oxide	AA
R3062	VRS-CY1JF102J	J	1.0k	1/16W Metal Oxide	AA
R3064	VRS-CY1JF102J	J	1.0k	1/16W Metal Oxide	AA
R3065	VRS-CY1JF222J	J	2.2k	1/16W Metal Oxide	AA
R3070	VRS-CY1JF102J	J	1.0k	1/16W Metal Oxide	AA
R3079	VRS-CY1JF392J	J	3.9k	1/16W Metal Oxide	AA
R3081	VRS-CY1JF271J	J	270	1/16W Metal Oxide	AA
R3083	VRS-CY1JF102J	J	1.0k	1/16W Metal Oxide	AA
R3084	VRS-CY1JF102J	J	1.0k	1/16W Metal Oxide	AA
R3088	VRS-CY1JF222J	J	2.2k	1/16W Metal Oxide	AA
R3093	VRS-CY1JF392J	J	3.9k	1/16W Metal Oxide	AA
R3301	VRS-CY1JF123J	J	12k	1/16W Metal Oxide	AA
R3302	VRS-CY1JF123J	J	12k	1/16W Metal Oxide	AA
R3303	VRS-CY1JF105J	J	1.0M	1/16W Metal Oxide	AA
R3304	VRS-CY1JF224J	J	220k	1/16W Metal Oxide	AA
R3305	VRS-CY1JF224J	J	220k	1/16W Metal Oxide	AA
R3306	VRS-CY1JF123J	J	12k	1/16W Metal Oxide	AA
R3307	VRS-CY1JF105J	J	1.0M	1/16W Metal Oxide	AA
R3308	VRS-CY1JF224J	J	220k	1/16W Metal Oxide	AA
R3309	VRS-CY1JF681J	J	680	1/16W Metal Oxide	AA
R3310	VRS-CY1JF681J	J	680	1/16W Metal Oxide	AA
R3311	VRS-CY1JF224J	J	220k	1/16W Metal Oxide	AA
R3312	VRS-CY1JF272J	J	2.7k	1/16W Metal Oxide	AA
R3313	VRS-CY1JF272J	J	2.7k	1/16W Metal Oxide	AA
R3314	VRS-CY1JF153J	J	15k	1/16W Metal Oxide	AA
R3315	VRS-TV1JD122J	J	1.2k	1/16W Metal Oxide	AA
R3316	VRS-CY1JF102J	J	1.0k	1/16W Metal Oxide	AA
R3317	VRS-CY1JF102J	J	1.0k	1/16W Metal Oxide	AA
R3318	VRS-CY1JF123J	J	12k	1/16W Metal Oxide	AA
R3319	VRS-CY1JF000J	J	0	1/16W Metal Oxide	AA
R3322	VRS-CY1JF331J	J	330	1/16W Metal Oxide	AA
R3323	VRS-CY1JF391J	J	390	1/16W Metal Oxide	AA
R3324	VRS-CY1JF470J	J	47	1/16W Metal Oxide	AA
R3325	VRS-CY1JF471J	J	470	1/16W Metal Oxide	AA
R3403	VRS-TW2ED750J	J	75	1/4W Metal Oxide	AA
R3405	VRS-CY1JF101J	J	100	1/16W Metal Oxide	AA
R3407	VRS-TW2ED750J	J	75	1/4W Metal Oxide	AA
R3408	VRS-TW2ED750J	J	75	1/4W Metal Oxide	AA
R3417	VRS-CY1JF101J	J	100	1/16W Metal Oxide	AA
R3418	VRS-CA1JF101J	J	100	1/16W Metal Oxide	AA
R3419	VRS-CY1JF101J	J	100	1/16W Metal Oxide	AA
R3420	VRS-CY1JF101J	J	100	1/16W Metal Oxide	AA
R3421	VRS-CY1JF101J	J	100	1/16W Metal Oxide	AA
R3422	VRS-CY1JF101J	J	100	1/16W Metal Oxide	AA
R3423	VRS-CY1JF101J	J	100	1/16W Metal Oxide	AA
R3424	VRS-CY1JF101J	J	100	1/16W Metal Oxide	AA
R3425	VRS-CY1JF101J	J	100	1/16W Metal Oxide	AA
R3427	VRS-CY1JF223J	J	22k	1/16W Metal Oxide	AA
R3428	VRS-CY1JF102J	J	1.0k	1/16W Metal Oxide	AA
R3429	VRS-CY1JF101J	J	100	1/16W Metal Oxide	AA
R3432	VRS-TV1JD000J	J	0	1/16W Metal Oxide	AA
R3433	VRS-TV1JD000J	J	0	1/16W Metal Oxide	AA
R3434	VRS-CY1JF000J	J	0	1/16W Metal Oxide	AA
R3502	VRS-CY1JF101J	J	100	1/16W Metal Oxide	AA
R3503	VRS-CY1JF391J	J	390	1/16W Metal Oxide	AA
R3505	VRS-CY1JF431J	J	430	1/16W Metal Oxide	AA
R3506	VRS-CY1JF821J	J	820	1/16W Metal Oxide	AA
R3507	VRS-CY1JF471J	J	470	1/16W Metal Oxide	AA
R3508	VRS-CY1JF122J	J	1.2k	1/16W Metal Oxide	AA
R3509	VRS-CY1JF561J	J	560	1/16W Metal Oxide	AA
R3511	VRS-CY1JF122J	J	1.2k	1/16W Metal Oxide	AA
R3512	VRS-CY1JF102J	J	1.0k	1/16W Metal Oxide	AA
R3514	VRS-CY1JF821J	J	820	1/16W Metal Oxide	AA
R3516	VRS-CY1JF132J	J	1.3k	1/16W Metal Oxide	AA
R3517	VRS-CY1JF561J	J	560	1/16W Metal Oxide	AA
R3518	VRS-CY1JF682J	J	6.8k	1/16W Metal Oxide	AA
R3519	VRS-TQ2BD471J	J	470	1/8W Metal Oxide	AA
R3521	VRS-CY1JF102J	J	1.0k	1/16W Metal Oxide	AA
R3522	VRS-CY1JF391J	J	390	1/16W Metal Oxide	AA
R3523	VRS-CY1JF104J	J	100k	1/16W Metal Oxide	AA
R3524	VRS-CY1JF102J	J	1.0k	1/16W Metal Oxide	AA
R3525	VRS-CY1JF102J	J	1.0k	1/16W Metal Oxide	AA
R3526	VRS-CY1JF100J	J	10	1/16W Metal Oxide	AA
R3527	VRS-CY1JF100J	J	10	1/16W Metal Oxide	AA
R3528	VRS-TX2HF2R2J	J	2.2	1/2W Metal Oxide	AB
R3529	VRS-TV1JD2R2J	J	2.2	1/16W Metal Oxide	AA
R3530	VRS-CY1JF000J	J	0	1/16W Metal Oxide	AA
R3531	VRS-CY1JF221J	J	220	1/16W Metal Oxide	AA
R3533	VRS-CY1JF473J	J	47k	1/16W Metal Oxide	AA
R3534	VRS-CY1JF224J	J	220k	1/16W Metal Oxide	AA
R3535	VRS-CY1JF102J	J	1.0k	1/16W Metal Oxide	AA
R3536	VRS-CY1JF222J	J	2.2k	1/16W Metal Oxide	AA
R3537	VRS-CY1JF471J	J	470	1/16W Metal Oxide	AA
R3538	VRS-CY1JF472J	J	4.7k	1/16W Metal Oxide	AA
R3544	VRS-CY1JF103J	J	10k	1/16W Metal Oxide	AA
R3545	VRS-CY1JF162F	J	1.6k	1/16W Metal Oxide	AA
R3550	VRS-CY1JF102F	J	1.0k	1/16W Metal Oxide	AA
R3561	VRS-CY1JF101J	J	100	1/16W Metal Oxide	AA
R3602	VRS-CA1JF101J	J	100	1/16W Metal Oxide	AA
R3603	VRS-CY1JF102J	J	1.0k	1/16W Metal Oxide	AA
R3604	VRS-CY1JF102J	J	1.0k	1/16W Metal Oxide	AA
R3605	VRS-CY1JF102J	J	1.0k	1/16W Metal Oxide	AA
R3606	VRS-CY1JF103J	J	10k	1/16W Metal Oxide	AA
R3607	VRS-CY1JF103J	J	10k	1/16W Metal Oxide	AA
R3608	VRS-CY1JF103J	J	10k	1/16W Metal Oxide	AA
R3609	VRS-CY1JF103J	J	10k	1/16W Metal Oxide	AA
R3610	VRS-CY1JF102J	J	1.0k	1/16W Metal Oxide	AA
R3611	VRS-CY1JF102J	J	1.0k	1/16W Metal Oxide	AA
R3612	VRS-CY1JF104J	J	100k	1/16W Metal Oxide	AA
R3701	VRS-CY1JF103J	J	10k	1/16W Metal Oxide	AA
R3708	VRS-CY1JF103J	J	10k	1/16W Metal Oxide	AA
R3710	VRS-TW2ED000J	J	0	1/4W Metal Oxide	AB
R3712	VRS-TQ2BD000J	J	0	1/8W Metal Oxide	AA
R3713	VRS-TQ2BD000J	J	0	1/8W Metal Oxide	AA
R3714	VRS-TQ2BD000J	J	0	1/8W Metal Oxide	AA
R3715	VRS-TQ2BD000J	J	0	1/8W Metal Oxide	AA
R3716	VRS-CY1JF103J	J	10k	1/16W Metal Oxide	AA

MISCELLANEOUS PARTS

Ref. No.	Part No.	★	Description	Code
FB3001	RBLN-0058CEZZ	J	Ferrite Bead	AB
FB3002	RBLN-0058CEZZ	J	Ferrite Bead	AB
FB3003	RBLN-0058CEZZ	J	Ferrite Bead	AB
FB3004	RBLN-0058CEZZ	J	Ferrite Bead	AB
FB3005	RBLN-0058CEZZ	J	Ferrite Bead	AB
FB3006	RBLN-0058CEZZ	J	Ferrite Bead	AB

DUNTKA340DE01/03
INPUT UNIT (Continued)

Ref. No.	Part No.	★	Description	Code
FB3007	RBLN-0058CEZZ	J	Ferrite Bead	AB
FB3008	RBLN-0059CEZZ	J	Ferrite Bead	AB
FB3009	RBLN-0059CEZZ	J	Ferrite Bead	AB
FB3301	RBLN-0064TAZZ	J	Ferrite Bead	AC
FB3302	RBLN-0064TAZZ	J	Ferrite Bead	AC
FB3303	RBLN-0058CEZZ	J	Ferrite Bead	AB
FB3304	RBLN-0064TAZZ	J	Ferrite Bead	AC
FB3305	RBLN-0058CEZZ	J	Ferrite Bead	AB
FB3306	RBLN-0058CEZZ	J	Ferrite Bead	AB
FB3307	RBLN-0064TAZZ	J	Ferrite Bead	AC
FB3308	RBLN-0058CEZZ	J	Ferrite Bead	AB
FB3309	RBLN-0058CEZZ	J	Ferrite Bead	AB
FB3310	RBLN-0058CEZZ	J	Ferrite Bead	AB
FB3311	RBLN-0058CEZZ	J	Ferrite Bead	AB
FB3312	RBLN-0059CEZZ	J	Ferrite Bead	AB
FB3501	RBLN-0059CEZZ	J	Ferrite Bead	AB
FB3601	RBLN-0058CEZZ	J	Ferrite Bead	AB
FB3602	RBLN-0058CEZZ	J	Ferrite Bead	AB
FB3603	RBLN-0058CEZZ	J	Ferrite Bead	AB
FB3604	RBLN-0058CEZZ	J	Ferrite Bead	AB
FB3605	RBLN-0058CEZZ	J	Ferrite Bead	AB
FB3607	RBLN-0058CEZZ	J	Ferrite Bead	AB
FB3609	RBLN-0059CEZZ	J	Ferrite Bead	AB
FB3610	RBLN-0058CEZZ	J	Ferrite Bead	AB
FB3611	RBLN-0058CEZZ	J	Ferrite Bead	AB
J3301	QJAKJ0006CEZZ	J	PC Audio IN	AF
J3302	QJAKJ0006CEZZ	J	PC Audio OUT	AF
J3303	QJAKG0076CEZZ	J	AV IN	AK
J3401	QJAKE0075TAZZ	J	Jack 4-Pin	AF
P3701	QPLGN0176FJZZ	J	Plug 4-Pin	AD
SC3001	QSOCN1599CEZZQ	J	Socket 15-Pin(RGB IN)	AD
SC3002	QSOCN1598CEZZQ	J	Socket 15-Pin(RGB OUT)	AN
SC3003	QCNCW0030CEZZ*	J	Socket 80-Pin	AK
SC3501	QCNCW3058TAZZ	J	Socket 30-Pin	AF
SC3601	QSOCD0902CEZZ	J	Socket 9-Pin	AL
	PSLDC3112CESA	J	Shield	AQ
	PSLDM4652CEFW	J	Shield	AF
	NSFTZ0134CEFW	J	Shaft	AD
	NSFTZ0175CEFW	J	Shaft	AB
	XBBSD20P03000	J	Screw	AA
	XEBSN26P06000	J	Screw	AA

DUNTKA341DE01/03
R/C RECEIVER UNIT

CAPACITORS

Ref. No.	Part No.	★	Description			Code
C5001	VCEAPF0JW476M	J	47	6.3V	Electrolytic	AB
C5002	VCKYCY1EF104Z	J	0.1	25V	Ceramic	AA

RESISTORS

Ref. No.	Part No.	★	Description			Code
R5001	VRS-TX2HF220J	J	22	1/2W	Metal Oxide	AB
R5003	VRS-CY1JF222J	J	2.2k	1/16W	Metal Oxide	AA

MISCELLANEOUS PARTS

Ref. No.	Part No.	★	Description	Code
P5001	QPLGN0320REZZ	J	Plug 3-Pin	AA
RMC5001	RRMCU0233CEZZ	J	R/C Receiver	AF
	PSLDC3111CEFW	J	Shield	AE

DUNTKA342DE01/03
3D Y/C SEPARATE UNIT

INTEGRATED CIRCUITS

Ref. No.	Part No.	★	Description	Code
IC3504	VHiPD64082/-1	J	UPD64082GF-3BA	BC
IC3505	RH-iX3420CEZZ	J	MSM5416258B-28	AT
IC3506	VHiPST600iM-1	J	IC-PST600IMT	AE

TRANSISTOR

Ref. No.	Part No.	★	Description	Code
Q3511	VS2SA1530AR-1	J	2SA1530AR	AB

PACKAGED CIRCUIT

Ref. No.	Part No.	★	Description	Code
X3501	RCRSB0258CEZZ	J	Crystal	AG

COILS

Ref. No.	Part No.	★	Description	Code
L3503	VP-1M100J1R6N	J	Peaking 10µH	AC
L3504	VP-1M4R7J1R2N	J	Peaking 4.7µH	AB

CAPACITORS

Ref. No.	Part No.	★	Description			Code
C3516	VCEAPV0JW226M	J	22	6.3V	Electrolytic	AC
C3525	VCEAPV0JW226M	J	22	6.3V	Electrolytic	AC
C3526	VCEAPV0JW226M	J	22	6.3V	Electrolytic	AC
C3527	VCKYCY1EF104Z	J	0.1	25V	Ceramic	AA
C3528	VCKYCY1EF104Z	J	0.1	25V	Ceramic	AA
C3529	VCKYCY1EF104Z	J	0.1	25V	Ceramic	AA
C3530	VCEAPV1CW106M	J	10	16V	Electrolytic	AD
C3531	VCKYCY1EF104Z	J	0.1	25V	Ceramic	AA
C3532	VCKYCY1EF104Z	J	0.1	25V	Ceramic	AA
C3533	VCKYCY1EF104Z	J	0.1	25V	Ceramic	AA
C3534	VCKYCY1EF104Z	J	0.1	25V	Ceramic	AA
C3535	VCKYCY1EF104Z	J	0.1	25V	Ceramic	AA
C3536	VCKYCY1EF104Z	J	0.1	25V	Ceramic	AA
C3538	VCKYCY1EF104Z	J	0.1	25V	Ceramic	AA
C3543	VCKYCY1EF104Z	J	0.1	25V	Ceramic	AA
C3545	VCKYCY1EF104Z	J	0.1	25V	Ceramic	AA
C3546	VCEAPV1HW474M	J	0.47	50V	Electrolytic	AC
C3547	VCKYCY1HB102K	J	1000p	50V	Ceramic	AA
C3548	VCKYCY1EF104Z	J	0.1	25V	Ceramic	AA
C3549	VCKYCY1EF104Z	J	0.1	25V	Ceramic	AA
C3550	VCKYCY1EF104Z	J	0.1	25V	Ceramic	AA
C3551	VCKYCY1EF104Z	J	0.1	25V	Ceramic	AA
C3552	VCKYCY1EF104Z	J	0.1	25V	Ceramic	AA
C3553	VCKYCY1EF104Z	J	0.1	25V	Ceramic	AA
C3554	VCCCCY1HH270J	J	27p	50V	Ceramic	AA
C3555	VCCCCY1HH220J	J	22p	50V	Ceramic	AA
C3556	VCEAPV0JW226M	J	22	6.3V	Electrolytic	AC
C3557	VCKYCY1EF104Z	J	0.1	25V	Ceramic	AA
C3558	VCCCCY1HH391J	J	390p	50V	Ceramic	AA
C3559	VCKYCY1EF104Z	J	0.1	25V	Ceramic	AA

RESISTORS

Ref. No.	Part No.	★	Description			Code
R3532	VRS-CY1JF000J	J	0	1/16W	Metal Oxide	AA
R3539	VRS-CY1JF182J	J	1.8k	1/16W	Metal Oxide	AA
R3540	VRS-CY1JF182J	J	1.8k	1/16W	Metal Oxide	AA
R3541	VRS-CA1JF101J	J	100	1/16W	Metal Oxide	AA
R3543	VRS-CY1JF102J	J	1.0k	1/16W	Metal Oxide	AA
R3547	VRS-CY1JF000J	J	0	1/16W	Metal Oxide	AA
R3548	VRS-CY1JF471J	J	470	1/16W	Metal Oxide	AA
R3549	VRS-CY1JF471J	J	470	1/16W	Metal Oxide	AA

MISCELLANEOUS PARTS

Ref. No.	Part No.	★	Description	Code
FB3502	RBLN-0059CEZZ	J	Ferrite Bead	AB
P3501	QCNCM0040CEZZ*	J	Plug 30-Pin	AG

RUNTK0689CEZZ
INLET UNIT

PACKAGED CIRCUIT

Ref. No.	Part No.	★	Description	Code
⚠ Z701	95C0D758A4710	J	ENC471	AK

COILS

Ref. No.	Part No.	★	Description	Code
⚠ L701	95C0L123R4520	J	FK-060E-4520H	AV
⚠ L702	95C0L123R4520	J	FK-060E-4520H	AV

CAPACITORS

Ref. No.	Part No.	★	Description	Code
⚠ C701	95C0C245Q2240	J	0.22 AC250V Film	AL
⚠ C703	95C0C1H8Q2220	J	2200p AC250V Ceramic	AH
⚠ C704	95C0C1H8Q2220	J	2200p AC250V Ceramic	AH
C705	95C0C245Q2240	J	0.22 AC250V Film	AL

RESISTOR

Ref. No.	Part No.	★	Description	Code
R791	95C0R390T8230	J	82k 1/4W Metal Oxide	AC
R792	95C0R390T8230	J	82k 1/4W Metal Oxide	AC
R793	95C0R390T8230	J	82k 1/4W Metal Oxide	AC

MISCELLANEOUS PARTS

Ref. No.	Part No.	★	Description	Code
⚠ F701	95C0K761A4R00	J	Fuse, 4.0A/AC250V	AS
CN701	95C0K251A0020	J	Connector B2P3-VH	AF
CN702	95C0K207B0020	J	Connector S2P3-VH	AH

RDENC0318CEZZ
POWER UNIT

INTEGRATED CIRCUITS

Ref. No.	Part No.	★	Description	Code
⚠ IC701	95CH1101AC001	J	FA5332M	BD
IC751	95C0H195A0010	J	NJM431U	AM

TRANSISTORS

Ref. No.	Part No.	★	Description	Code
Q701	95C0T643A0010	J	2SK2698	AY
Q703	95C0T394A0010	J	2SC4081	AH
Q704	95C0T645A0020	J	2SK2717	AW
Q706	95C0T394A0010	J	2SC4081	AH
Q707	95C0T196A0010	J	2SA1812	AS
Q708	95C0T192A0010	J	2SA1576A	AH
Q709	95C0T394A0010	J	2SC4081	AH
Q710	95C0T395A0020	J	2SC4097	AL
Q752	95C0T394A0010	J	2SC4081	AH

DIODES

Ref. No.	Part No.	★	Description	Code
⚠ D701	95C0D114A6040	J	Diode,D3SBA60	AV
D702	95C0D223B0060	J	Diode,YG912S6	AW
D703	95C0D2Q3A0040	J	Diode,EC10QS04	AM
D704	95C0D295A0080	J	Diode,1SS355	AE
D706	95C0D295A0080	J	Diode,1SS355	AE
D707	95C0D295A0080	J	Diode,1SS355	AE
D709	95C0D292A0020	J	Diode,SC902-2	AM
D712	95C0D491A0290	J	Zener Diode,UDZ 30B	AM
D713	95C0D491A0290	J	Zener Diode,UDZ 30B	AM
D714	95C0D491A0230	J	Zener Diode,UDZ 16B	AM
D716	95C0D492A0020	J	Zener Diode,UDZS 5.6B	AK
D719	95C0D491A0290	J	Zener Diode,UDZ 30B	AM
D720	95C0D264A0100	J	Diode,ERB44-10	AL
D721	95C0D295A0080	J	Diode,1SS355	AE
D722	95C0D295A0080	J	Diode,1SS355	AE
D723	95C0D295A0080	J	Diode,1SS355	AE
D724	95C0D295A0080	J	Diode,1SS355	AE
D751	95C0D219B0060	J	Diode,YG811S06R	AM
D752	95C0D292A0020	J	Diode,SC902-2	AM
D753	95C0D2Q1A0060	J	Diode,EC21QS06	AQ
D754	95C0D2Q1A0060	J	Diode,EC21QS06	AQ
D755	95C0D292A0020	J	Diode,SC902-2	AM
D756	95C0D491A0250	J	Zener Diode,UDZ 20B	AM
D757	95C0D491A0230	J	Zener Diode,UDZ 16B	AM
D758	95C0D295A0080	J	Diode,1SS355	AE
D759	95C0D492A0050	J	Zener Diode,UDZ S7.5B	AK
D760	95C0D295A0080	J	Diode,1SS355	AE
D761	95C0D295A0080	J	Diode,1SS355	AE
TRA701	95C0D513A4060	J	SM6GZ47	AV

PACKAGED CIRCUITS

Ref. No.	Part No.	★	Description	Code
⚠ PC701	95CH7101AS002	J	Photocoupler SFH615AGR	AN
⚠ PC702	95CH7101AS002	J	Photocoupler SFH615AGR	AN
⚠ PC703	95CH7101AS002	J	Photocoupler SFH615AGR	AN
NTC701	95C0D756A1200	J	Thermistor, NTH13D120LHT62A	AV
PTC701	95C0D802A1010	J	PTH9M04BD222TS2F333	AP

COILS AND TRANSFORMER

Ref. No.	Part No.	★	Description	Code
L703	95CL1000BL002	J	1BL02	BH
L704	95C0L126R7200	J	SK-08MS-5YRPS2	AV
⚠ T701	95CL2000DL031	J	Transformer, 2DL31	BM

CONTROL

Ref. No.	Part No.	★	Description	Code
VR701	95C0R854E1020	J	1k 1/10W	AH
VR751	95C0R854E1020	J	1k 1/10W	AH

CAPACITORS

Ref. No.	Part No.	★	Description	Code
C706	95C0C247M4740	J	0.47 450V Film	AV
C707	95C0C344M1210	J	120 400V Electrolytic	BB
C709	95C0C238N4740	J	0.47 630V Film	AQ
C710	95C0C195E1030	J	0.01 50V Ceramic	AC
C712	95C0C195C1040	J	0.1 25V Ceramic	AD
C713	95C0C195C1040	J	0.1 25V Ceramic	AD
C714	95C0C195C1040	J	0.1 25V Ceramic	AD
C715	95C0C3A0D5600	J	56 35V Electrolytic	AM
C716	95C0C194E4710	J	470p 50V Ceramic	AC
C717	95C0C195E1030	J	0.01 50V Ceramic	AC
C718	95C0C195E4720	J	4700p 50V Ceramic	AC
C719	95C0C194E3310	J	330p 50V Ceramic	AC
C720	95C0C195C1040	J	0.1 25V Ceramic	AD
C721	95C0C1A9R4710	J	470p 1kV Ceramic	AH
⚠ C723	95C0C1H8Q2220	J	2200p AC250V Ceramic	AH
C724	95C0C194E1010	J	100p 50V Ceramic	AC
C725	95C0C1A9R1520	J	1500p 1kV Ceramic	AL
C726	95C0C195E4720	J	4700p 50V Ceramic	AC
⚠ C727	95C0C1H8Q1020	J	1000p AC250V Ceramic	AH
C728	95C0C1Q0A1060	J	10 6.3V Ceramic	AQ
C729	95C0C193A4720	J	4700p 50V Ceramic	AM
C730	95C0C195C1040	J	0.1 25V Ceramic	AD
C731	95C0C194E1010	J	100p 50V Ceramic	AC
C732	95C0C195E1040	J	0.1 50V Ceramic	AF
C733	95C0C238N4730	J	0.047 630V Film	AQ
C751	95C0C3A0D1510	J	150 35V Electrolytic	AM
C752	95C0C3A0D3310	J	330 35V Electrolytic	AS
C753	95C0C3A0D3310	J	330 35V Electrolytic	AS
C754	95C0C3A0A1220	J	1200 10V Electrolytic	AS
C757	95C0C195C1040	J	0.1 25V Ceramic	AD
C762	95C0C1A9R2210	J	220p 1kV Ceramic	AF
C764	95C0C1A9R2210	J	220p 1kV Ceramic	AF
C765	95C0C1A9R2210	J	220p 1kV Ceramic	AF
C766	95C0C1A1S2210	J	220p 2kV Ceramic	AF

RESISTORS

Ref. No.	Part No.	★	Description	Code
R701	95C0R391T1040	J	100k 1/4W Metal Oxide	AF
R702	95C0R390T1540	J	150k 1/4W Metal Oxide	AC
R703	95C0R390T1540	J	150k 1/4W Metal Oxide	AC
R704	95C0R390T1540	J	150k 1/4W Metal Oxide	AC
R705	95C0R3Q0V3330	J	33k 1/8W Metal Oxide	AB
R706	95C0R3Q0V1030	J	10k 1/8W Metal Oxide	AB
R707	95C0R3Q0V1030	J	10k 1/8W Metal Oxide	AB
R708	95C0R3Q1V4730	J	47k 1/8W Metal Oxide	AF
R709	95C0R390T2240	J	220k 1/4W Metal Oxide	AC
R710	95C0R391T1840	J	180k 1/4W Metal Oxide	AC
R711	95C0R391T1840	J	180k 1/4W Metal Oxide	AC

RDENC0318CEZZ
POWER UNIT (Continued)

Ref. No.	Part No.	★	Description			Code
R712	95C0R3Q3V2220	J	2.2k	1/10W	Metal Oxide	AC
R713	95C0R391T1240	J	120k	1/4W	Metal Oxide	AF
R714	95C0R391T1840	J	180k	1/4W	Metal Oxide	AC
R715	95C0R391T1240	J	120k	1/4W	Metal Oxide	AF
R716	95C0R516FR100	J	0.1	3W	Metal Plate	AN
R717	95C0R3Q0V1240	J	120k	1/8W	Metal Oxide	AF
R718	95C0R3Q0V1010	J	100	1/8W	Metal Oxide	AF
R719	95C0R390T1200	J	12	1/4W	Metal Oxide	AF
R720	95C0R3Q3V2220	J	2.2k	1/10W	Metal Oxide	AC
R721	95C0R3Q1V2730	J	27k	1/8W	Metal Oxide	AF
R722	95C0R3Q0V3330	J	33k	1/8W	Metal Oxide	AB
R723	95C0R3Q0V1010	J	100	1/8W	Metal Oxide	AF
R725	95C0R3Q1V2220	J	2.2k	1/8W	Metal Oxide	AC
R726	95C0R3Q0V1030	J	10k	1/8W	Metal Oxide	AB
R727	95C0R390T1040	J	100k	1/4W	Metal Oxide	AF
R728	95C0R390T3340	J	330k	1/4W	Metal Oxide	AC
R729	95C0R390T1000	J	10	1/4W	Metal Oxide	AC
R730	95C0R390T1830	J	18k	1/4W	Metal Oxide	AD
R731	95C0R390T2210	J	220	1/4W	Metal Oxide	AF
R732	95C0R390T4710	J	470	1/4W	Metal Oxide	AD
R733	95C0R3Q1V6820	J	6.8k	1/8W	Metal Oxide	AF
R734	95C0R3Q1V1830	J	18k	1/8W	Metal Oxide	AF
R735	95C0R3Q0V4710	J	470	1/8W	Metal Oxide	AB
R736	95C0R3Q1V1030	J	10k	1/8W	Metal Oxide	AC
R737	95C0R3Q3V3340	J	330k	1/10W	Metal Oxide	AF
R738	95C0R3Q0V1030	J	10k	1/8W	Metal Oxide	AB
R739	95C0R3Q0V1030	J	10k	1/8W	Metal Oxide	AB
R740	95C0R390T1830	J	18k	1/4W	Metal Oxide	AD
R741	95C0R3Q0V3330	J	33k	1/8W	Metal Oxide	AB
R742	95C0R3Q0V1020	J	1.0k	1/8W	Metal Oxide	AB
R743	95C0R390T3340	J	330k	1/4W	Metal Oxide	AC
R744	95C0R390T3340	J	330k	1/4W	Metal Oxide	AC
R745	95C0R3Q0V1010	J	100	1/8W	Metal Oxide	AF
R746	95C0R451C6830	J	68k	1W	Metal Oxide	AH
R747	95C0R3Q0V6820	J	6.8k	1/8W	Metal Oxide	AF
R748	95C0R3Q0V6810	J	680	1/8W	Metal Oxide	AF
R749	95C0R390T2710	J	270	1/4W	Metal Oxide	AF
R751	95C0R3Q0V3320	J	3.3k	1/8W	Metal Oxide	AF
R752	95C0R390T3320	J	3.3k	1/4W	Metal Oxide	AC
R754	95C0R3Q0V6810	J	680	1/8W	Metal Oxide	AF
R756	95C0R3Q0V3330	J	33k	1/8W	Metal Oxide	AB
R757	95C0R3Q0V5630	J	56k	1/8W	Metal Oxide	AF
R760	95C0R3Q0V1020	J	1.0k	1/8W	Metal Oxide	AB
R761	95C0R3Q0V1020	J	1.0k	1/8W	Metal Oxide	AB
R762	95C0R3Q0V1030	J	10k	1/8W	Metal Oxide	AB
R763	95C0R3Q1V6820	J	6.8k	1/8W	Metal Oxide	AF
R764	95C0R3Q1V1820	J	1.8k	1/8W	Metal Oxide	AC
R765	95C0R390T3310	J	330	1/4W	Metal Oxide	AC
R795	95C0R451C6830	J	68k	1W	Metal Oxide	AH
R796	95C0R451C1000	J	10	1W	Metal Oxide	AD
R797	95C0R390T2710	J	270	1/4W	Metal Oxide	AF
R798	95C0R390T2710	J	270	1/4W	Metal Oxide	AF
R799	95C0R390T2710	J	270	1/4W	Metal Oxide	AF

MISCELLANEOUS PARTS

Ref. No.	Part No.	★	Description	Code
BEA701	95C0L551A0010	J	Ferrite Bead BL02RN1-R62	AD
BEA702	95C0L551A0020	J	Ferrite Bead BL02RN2-R62	AE
CN703	95C0K207B0020	J	Connector, S2P3-VH	AH
CN704	95C0PF20040	J	Connector (PL)	AV
CN751	95C0K236B0140	J	Connector, B14B-PHDSS-B	AS

CPCi-0050CE01/03
PC I/F UNIT

INTEGRATED CIRCUITS

Ref. No.	Part No.	★	Description	Code
IC8001	9DK001-15097	J	ICS9161A-01CW16	BB
IC8003	VHiVPC3230D-1Q	J	VPC3230D	BG
IC8004	9DK001-15074	J	ML6420-3	BD
IC8006	9DK001-15098	J	CXA1839Q	BD
IC8008	9DK001-15087	J	NJM2137V	AS
IC8009	9DK001-15089	J	TL712CPW	AR
IC8010	9DK001-15089	J	TL712CPW	AR
IC8011	9DK001-15062	J	LM4040CIM3-4.1	AS
IC8012	9DK001-15073	J	AD8183	BB
IC8018	9DK001-15061	J	PST600IM	AL
IC8019	9DK001-12093	J	NC7S14P5	AL
IC8020	9DK001-12093	J	NC7S14P5	AL
IC8021	RH-iX3486CEZZQ	J	Ic	BC
IC8022	VHiPW1641RK-1Q	J	PW164-10RK	BY
IC8023	RH-iX3399CEN2Q	J	IC	BM
IC8024	9DK001-15091	J	CXD2309AQ	BB
IC8025	9DK001-15053	J	TL431CPS	AL
IC8026	9DK001-15099	J	THC7116-16	BS
IC8030	9DK001-12096	J	TC7WH126FK	AM
IC8032	9DK001-15096	J	AD8013AR	BB
IC8033	VHiPQ1R33//-1*	J	PQ1R33	AE
IC8034	VHiPQ1R50//-1*	J	PQ1R50	AF
IC8035	9DK001-12098	J	SN74CBTD1G125DCK	AM
IC8036	9DK001-12098	J	SN74CBTD1G125DCK	AM
IC8037	9DK001-12095	J	TC7W32FK	AM
IC8040	9DK001-15071	J	PQ20VZ11	AL

TRANSISTOR

Ref. No.	Part No.	★	Description	Code
Q8001	9DK001-20011	J	2SC2412KQ	AE
Q8002	9DK001-20011	J	2SC2412KQ	AE
Q8003	9DK001-20011	J	2SC2412KQ	AE
Q8010	9DK001-20012	J	2SA1037AKQ	AE
Q8011	9DK001-20011	J	2SC2412KQ	AE
Q8012	9DK001-20033	J	HN1K03FU	AG
Q8013	9DK001-20034	J	2SC2735	AH
Q8014	9DK001-20034	J	2SC2735	AH
Q8015	9DK001-20034	J	2SC2735	AH
Q8016	9DK001-20012	J	2SA1037AKQ	AE
Q8017	9DK001-20011	J	2SC2412KQ	AE

DIODES

Ref. No.	Part No.	★	Description	Code
D8001	9DK001-30018	J	1SS187	AD
D8002	9DK001-30018	J	1SS187	AD
D8003	9DK001-30018	J	1SS187	AD

PACKAGED CIRCUITS

Ref. No.	Part No.	★	Description	Code
X8001	9DK001-80020	J	Crystal, 20.25MHz	AR
X8003	9DK001-80019	J	Crystal, 16MHz	AR

FILTERS

Ref. No.	Part No.	★	Description	Code
FL8001	9DK001-82020	J	Filter, BMK351	AG
FL8002	9DK001-82020	J	Filter, BMK351	AG
FL8003	9DK001-82020	J	Filter, BMK351	AG
FL8004	9DK001-82021	J	Filter, BMS100	AH
FL8017	9DK001-82020	J	Filter, BMK351	AG
FL8018	9DK001-82020	J	Filter, BMK351	AG
FL8019	9DK001-82020	J	Filter, BMK351	AG
FL8020	9DK001-82020	J	Filter, BMK351	AG
FL8021	9DK001-82021	J	Filter, BMS100	AH
FL8022	9DK001-82020	J	Filter, BMK351	AG
FL8023	9DK001-82020	J	Filter, BMK351	AG
FL8024	9DK001-82020	J	Filter, BMK351	AG
FL8025	9DK001-82020	J	Filter, BMK351	AG
FL8026	9DK001-82020	J	Filter, BMK351	AG
FL8027	9DK001-82020	J	Filter, BMK351	AG
FL8028	9DK001-82020	J	Filter, BMK351	AG
FL8029	9DK001-82020	J	Filter, BMK351	AG
FL8030	9DK001-82021	J	Filter, BMS100	AH
FL8031	9DK001-82020	J	Filter, BMK351	AG
FL8034	9DK001-82021	J	Filter, BMS100	AH

CPCi-0050CE01/03
PC I/F UNIT (Continued)

Ref. No.	Part No.	★	Description	Code
FL8060	9DK001-82020	J	Filter, BMK351	AG
FL8061	9DK001-82020	J	Filter, BMK351	AG
FL8062	9DK001-82020	J	Filter, BMK351	AG
FL8064	9DK001-82021	J	Filter, BMS100	AH
FL8065	9DK001-82021	J	Filter, BMS100	AH

COILS

Ref. No.	Part No.	★	Description	Code
L8001	9DK001-81061	J	Coil, 3.3µH	AG
L8002	9DK001-81061	J	Coil, 3.3µH	AG
L8003	9DK001-81061	J	Coil, 3.3µH	AG
L8004	9DK001-81050	J	Coil, 68µH	AG
L8030	9DK001-81050	J	Coil, 68µH	AG
L8031	9DK001-81050	J	Coil, 68µH	AG
L8032	9DK001-81050	J	Coil, 68µH	AG
NF8001	9DK001-81057	J	Choke Coil, PLP3216S551SL2	AT

CAPACITORS

Ref. No.	Part No.	★	Description	Code
C8001	9DK001-40089	J	47 6.3V Electrolytic	AE
C8002	9DK001-40089	J	47 6.3V Electrolytic	AE
C8003	9DK001-40080	J	100 6.3V Electrolytic	AF
C8004	9DK001-42094	J	0.1 25V Ceramic	AC
C8005	9DK001-40079	J	47 16V Electrolytic	AG
C8006	9DK001-42115	J	10p 50V Ceramic	AC
C8007	9DK001-42115	J	10p 50V Ceramic	AC
C8008	9DK001-42094	J	0.1 25V Ceramic	AC
C8009	9DK001-42140	J	0.022 25V Ceramic	AC
C8012	9DK001-42144	J	0.68 10V Ceramic	AC
C8013	9DK001-42144	J	0.68 10V Ceramic	AC
C8014	9DK001-42144	J	0.68 10V Ceramic	AC
C8015	9DK001-42144	J	0.68 10V Ceramic	AC
C8016	9DK001-42144	J	0.68 10V Ceramic	AC
C8017	9DK001-42143	J	0.22 16V Ceramic	AC
C8018	9DK001-42143	J	0.22 16V Ceramic	AC
C8019	9DK001-42139	J	1500p 50V Ceramic	AC
C8020	9DK001-42139	J	1500p 50V Ceramic	AC
C8021	9DK001-42116	J	390p 50V Ceramic	AC
C8022	9DK001-42116	J	390p 50V Ceramic	AC
C8023	9DK001-40077	J	10 16V Electrolytic	AF
C8024	9DK001-40077	J	10 16V Electrolytic	AF
C8025	9DK001-40077	J	10 16V Electrolytic	AF
C8026	9DK001-42094	J	0.1 25V Ceramic	AC
C8027	9DK001-42105	J	0.047 50V Ceramic	AC
C8028	9DK001-42102	J	2200p 50V Ceramic	AC
C8029	9DK001-40097	J	10 16V Elect(N.P)	AG
C8030	9DK001-42115	J	10p 50V Ceramic	AC
C8031	9DK001-42115	J	10p 50V Ceramic	AC
C8032	9DK001-42123	J	330p 50V Ceramic	AC
C8033	9DK001-40097	J	10 16V Elect(N.P)	AG
C8034	9DK001-42123	J	330p 50V Ceramic	AC
C8035	9DK001-40097	J	10 16V Elect(N.P)	AG
C8036	9DK001-42123	J	330p 50V Ceramic	AC
C8037	9DK001-42143	J	0.22 16V Ceramic	AC
C8038	9DK001-42139	J	1500p 50V Ceramic	AC
C8039	9DK001-42116	J	390p 50V Ceramic	AC
C8040	9DK001-42139	J	1500p 50V Ceramic	AC
C8041	9DK001-42105	J	0.047 50V Ceramic	AC
C8042	9DK001-42094	J	0.1 25V Ceramic	AC
C8043	9DK001-42142	J	0.068 50V Ceramic	AC
C8044	9DK001-40077	J	10 16V Electrolytic	AF
C8045	9DK001-40077	J	10 16V Electrolytic	AF
C8046	9DK001-42142	J	0.068 50V Ceramic	AC
C8047	9DK001-42142	J	0.068 50V Ceramic	AC
C8048	9DK001-42139	J	1500p 50V Ceramic	AC
C8049	9DK001-42105	J	0.047 50V Ceramic	AC
C8050	9DK001-40077	J	10 16V Electrolytic	AF
C8051	9DK001-42094	J	0.1 25V Ceramic	AC
C8052	9DK001-40089	J	47 6.3V Electrolytic	AE
C8063	9DK001-42094	J	0.1 25V Ceramic	AC
C8065	9DK001-42069	J	0.1 25V Ceramic	AB
C8066	9DK001-42094	J	0.1 25V Ceramic	AC
C8067	9DK001-40077	J	10 16V Electrolytic	AF
C8068	9DK001-40101	J	0.47 50V Electrolytic	AG
C8070	9DK001-42069	J	0.1 25V Ceramic	AB
C8071	9DK001-42096	J	0.01 50V Ceramic	AC
C8072	9DK001-42096	J	0.01 50V Ceramic	AC
C8073	9DK001-42096	J	0.01 50V Ceramic	AC
C8075	9DK001-42069	J	0.1 25V Ceramic	AB
C8077	9DK001-42096	J	0.01 50V Ceramic	AC
C8078	9DK001-42096	J	0.01 50V Ceramic	AC
C8079	9DK001-42096	J	0.01 50V Ceramic	AC
C8080	9DK001-42096	J	0.01 50V Ceramic	AC
C8082	9DK001-42096	J	0.01 50V Ceramic	AC
C8083	9DK001-42096	J	0.01 50V Ceramic	AC
C8085	9DK001-42094	J	0.1 25V Ceramic	AC
C8088	9DK001-42094	J	0.1 25V Ceramic	AC
C8089	9DK001-40093	J	0.47 50V Elect.(N.P)	AE
C8090	9DK001-42094	J	0.1 25V Ceramic	AC
C8091	9DK001-42094	J	0.1 25V Ceramic	AC
C8092	9DK001-42102	J	2200p 50V Ceramic	AC
C8093	9DK001-42094	J	0.1 25V Ceramic	AC
C8094	9DK001-42094	J	0.1 25V Ceramic	AC
C8095	9DK001-42094	J	0.1 25V Ceramic	AC
C8099	9DK001-42094	J	0.1 25V Ceramic	AC
C8100	9DK001-42094	J	0.1 25V Ceramic	AC
C8101	9DK001-42094	J	0.1 25V Ceramic	AC
C8106	9DK001-42099	J	100p 50V Ceramic	AC
C8107	9DK001-42118	J	10 25V Ceramic	AL
C8109	9DK001-42096	J	0.01 50V Ceramic	AC
C8110	9DK001-40077	J	10 16V Electrolytic	AF
C8111	9DK001-40077	J	10 16V Electrolytic	AF
C8112	9DK001-40077	J	10 16V Electrolytic	AF
C8140	9DK001-42094	J	0.1 25V Ceramic	AC
C8141	9DK001-42094	J	0.1 25V Ceramic	AC
C8142	9DK001-42094	J	0.1 25V Ceramic	AC
C8143	9DK001-42094	J	0.1 25V Ceramic	AC
C8144	9DK001-42094	J	0.1 25V Ceramic	AC
C8145	9DK001-42094	J	0.1 25V Ceramic	AC
C8146	9DK001-42094	J	0.1 25V Ceramic	AC
C8147	9DK001-40091	J	100 4V Electrolytic	AF
C8148	9DK001-42094	J	0.1 25V Ceramic	AC
C8149	9DK001-42094	J	0.1 25V Ceramic	AC
C8150	9DK001-42094	J	0.1 25V Ceramic	AC
C8151	9DK001-42094	J	0.1 25V Ceramic	AC
C8152	9DK001-40089	J	47 6.3V Electrolytic	AE
C8153	9DK001-42094	J	0.1 25V Ceramic	AC
C8154	9DK001-42094	J	0.1 25V Ceramic	AC
C8155	9DK001-42094	J	0.1 25V Ceramic	AC
C8156	9DK001-42094	J	0.1 25V Ceramic	AC
C8157	9DK001-42094	J	0.1 25V Ceramic	AC
C8160	9DK001-42129	J	0.01 16V Film	AL
C8161	9DK001-40089	J	47 6.3V Electrolytic	AF
C8162	9DK001-40090	J	47 4V Electrolytic	AF
C8163	9DK001-42096	J	0.01 50V Ceramic	AC
C8164	9DK001-42096	J	0.01 50V Ceramic	AC
C8165	9DK001-42096	J	0.01 50V Ceramic	AC
C8166	9DK001-42096	J	0.01 50V Ceramic	AC
C8167	9DK001-42096	J	0.01 50V Ceramic	AC
C8168	9DK001-42096	J	0.01 50V Ceramic	AC
C8169	9DK001-40091	J	100 4V Electrolytic	AF
C8170	9DK001-42096	J	0.01 50V Ceramic	AC
C8171	9DK001-42096	J	0.01 50V Ceramic	AC
C8172	9DK001-42096	J	0.01 50V Ceramic	AC
C8173	9DK001-42096	J	0.01 50V Ceramic	AC
C8174	9DK001-42096	J	0.01 50V Ceramic	AC
C8175	9DK001-42096	J	0.01 50V Ceramic	AC
C8176	9DK001-42096	J	0.01 50V Ceramic	AC
C8177	9DK001-40077	J	10 16V Electrolytic	AF
C8179	9DK001-40077	J	10 16V Electrolytic	AF
C8182	9DK001-42094	J	0.1 25V Ceramic	AC
C8183	9DK001-40077	J	10 16V Electrolytic	AF
C8184	9DK001-42111	J	1 10V Ceramic	AB
C8187	9DK001-42094	J	0.1 25V Ceramic	AC
C8188	9DK001-42094	J	0.1 25V Ceramic	AC
C8189	9DK001-42094	J	0.1 25V Ceramic	AC
C8190	9DK001-40077	J	10 16V Electrolytic	AE
C8192	9DK001-40089	J	47 6.3V Electrolytic	AE

CPCi-0050CE01/03
PC I/F UNIT (Continued)

Ref. No.	Part No.	★	Description			Code
C8196	9DK001-40081	J	22	6.3V	Electrolytic	AF
C8197	9DK001-42094	J	0.1	25V	Ceramic	AC
C8198	9DK001-42094	J	0.1	25V	Ceramic	AC
C8200	9DK001-42094	J	0.1	25V	Ceramic	AC
C8201	9DK001-42096	J	0.01	50V	Ceramic	AC
C8202	9DK001-40081	J	22	6.3V	Electrolytic	AF
C8203	9DK001-42096	J	0.01	50V	Ceramic	AC
C8204	9DK001-42141	J	0.033	25V	Ceramic	AC
C8205	9DK001-42094	J	0.1	25V	Ceramic	AC
C8206	9DK001-42096	J	0.01	50V	Ceramic	AC
C8207	9DK001-42096	J	0.01	50V	Ceramic	AC
C8208	9DK001-42141	J	0.033	25V	Ceramic	AC
C8209	9DK001-42141	J	0.033	25V	Ceramic	AC
C8210	9DK001-42094	J	0.1	25V	Ceramic	AC
C8211	9DK001-42096	J	0.01	50V	Ceramic	AC
C8212	9DK001-42096	J	0.01	50V	Ceramic	AC
C8213	9DK001-42141	J	0.033	25V	Ceramic	AC
C8214	9DK001-42094	J	0.1	25V	Ceramic	AC
C8218	9DK001-42140	J	0.022	25V	Ceramic	AC
C8219	9DK001-42138	J	220p	50V	Ceramic	AC
C8221	9DK001-42094	J	0.1	25V	Ceramic	AC
C8222	9DK001-42094	J	0.1	25V	Ceramic	AC
C8223	9DK001-42094	J	0.1	25V	Ceramic	AC
C8224	9DK001-42094	J	0.1	25V	Ceramic	AC
C8226	9DK001-42094	J	0.1	25V	Ceramic	AC
C8227	9DK001-42094	J	0.1	25V	Ceramic	AC
C8228	9DK001-42094	J	0.1	25V	Ceramic	AC
C8229	9DK001-42094	J	0.1	25V	Ceramic	AC
C8230	9DK001-42094	J	0.1	25V	Ceramic	AC
C8231	9DK001-42094	J	0.1	25V	Ceramic	AC
C8232	9DK001-42094	J	0.1	25V	Ceramic	AC
C8300	9DK001-40078	J	22	16V	Electrolytic	AF
C8301	9DK001-40078	J	22	16V	Electrolytic	AF
C8305	9DK001-42111	J	1	10V	Ceramic	AB
C8306	9DK001-42094	J	0.1	25V	Ceramic	AC
C8307	9DK001-42094	J	0.1	25V	Ceramic	AC
C8312	9DK001-40089	J	47	6.3V	Electrolytic	AE
C8314	9DK001-42134	J	0.47	10V	Ceramic	
C8316	9DK001-42099	J	100p	50V	Ceramic	AC
C8318	9DK001-42094	J	0.1	25V	Ceramic	AC
C8319	9DK001-42094	J	0.1	25V	Ceramic	AC
C8320	9DK001-42094	J	0.1	25V	Ceramic	AC
C8321	9DK001-42094	J	0.1	25V	Ceramic	AC

RESISTORS

Ref. No.	Part No.	★	Description			Code
C8086	9DK001-50179	J	2.2k	1/16W	Chip 1608	AA
C8108	9DK001-50171	J	330	1/16W	Chip 1608	AA
C8304	9DK001-50205	J	1.8k	1/16W	Chip 1608	AA
C8308	9DK001-50173	J	470	1/16W	Chip 1608	AA
C8309	9DK001-50173	J	470	1/16W	Chip 1608	AA
C8311	9DK001-50169	J	220	1/16W	Chip 1608	AA
R8004	9DK001-50161	J	47	1/16W	Chip 1608	AA
R8005	9DK001-50161	J	47	1/16W	Chip 1608	AA
R8006	9DK001-50165	J	100	1/16W	Chip 1608	AA
R8007	9DK001-50161	J	47	1/16W	Chip 1608	AA
R8008	9DK001-50165	J	100	1/16W	Chip 1608	AA
R8009	9DK001-50185	J	10k	1/16W	Chip 1608	AA
R8010	9DK001-50181	J	3.3k	1/16W	Chip 1608	AA
R8012	9DK001-50177	J	1.0k	1/16W	Chip 1608	AA
R8014	9DK001-50111	J	75	1/4W	Chip 3216	AB
R8016	9DK001-50111	J	75	1/4W	Chip 3216	AB
R8018	9DK001-50111	J	75	1/4W	Chip 3216	AB
R8020	9DK001-50149	J	0	1/16W	Chip 1608	AB
R8021	9DK001-50173	J	470	1/16W	Chip 1608	AA
R8022	9DK001-50186	J	22k	1/16W	Chip 1608	AA
R8023	9DK001-50173	J	470	1/16W	Chip 1608	AA
R8024	9DK001-50173	J	470	1/16W	Chip 1608	AA
R8025	9DK001-50171	J	330	1/16W	Chip 1608	AA
R8027	9DK001-50186	J	22k	1/16W	Chip 1608	AA
R8028	9DK001-50149	J	0	1/16W	Chip 1608	AB
R8029	9DK001-50177	J	1.0k	1/16W	Chip 1608	AA
R8030	9DK001-50186	J	22k	1/16W	Chip 1608	AA
R8031	9DK001-50171	J	330	1/16W	Chip 1608	AA
R8032	9DK001-50186	J	22k	1/16W	Chip 1608	AA
R8033	9DK001-50177	J	1.0k	1/16W	Chip 1608	AA
R8034	9DK001-50150	J	10	1/16W	Chip 1608	AA
R8035	9DK001-50150	J	10	1/16W	Chip 1608	AA
R8036	9DK001-50186	J	22k	1/16W	Chip 1608	AA
R8037	9DK001-50171	J	330	1/16W	Chip 1608	AA
R8038	9DK001-50186	J	22k	1/16W	Chip 1608	AA
R8039	9DK001-50177	J	1.0k	1/16W	Chip 1608	AA
R8050	9DK001-51038	J	47	1/16W	Resistor Array	AA
R8051	9DK001-51038	J	47	1/16W	Resistor Array	AA
R8052	9DK001-51038	J	47	1/16W	Resistor Array	AA
R8054	9DK001-51038	J	47	1/16W	Resistor Array	AA
R8056	9DK001-50161	J	47	1/16W	Chip 1608	AA
R8057	9DK001-50161	J	47	1/16W	Chip 1608	AA
R8058	9DK001-50150	J	10	1/16W	Chip 1608	AA
R8059	9DK001-50161	J	47	1/16W	Chip 1608	AA
R8060	9DK001-50161	J	47	1/16W	Chip 1608	AA
R8061	9DK001-50149	J	0	1/16W	Chip 1608	AB
R8063	9DK001-50149	J	0	1/16W	Chip 1608	AB
R8069	9DK001-50149	J	0	1/16W	Chip 1608	AB
R8071	9DK001-50149	J	0	1/16W	Chip 1608	AB
R8079	9DK001-50209	J	27k	1/16W	Chip 1608	AA
R8080	9DK001-50149	J	0	1/16W	Chip 1608	AB
R8082	9DK001-50165	J	100	1/16W	Chip 1608	AA
R8083	9DK001-50149	J	0	1/16W	Chip 1608	AB
R8085	9DK001-50149	J	0	1/16W	Chip 1608	AB
R8088	9DK001-50149	J	0	1/16W	Chip 1608	AB
R8090	9DK001-50185	J	10k	1/16W	Chip 1608	AA
R8104	9DK001-50177	J	1.0k	1/16W	Chip 1608	AA
R8105	9DK001-50185	J	10k	1/16W	Chip 1608	AA
R8106	9DK001-50171	J	330	1/16W	Chip 1608	AA
R8107	9DK001-50177	J	1.0k	1/16W	Chip 1608	AA
R8108	9DK001-50165	J	100	1/16W	Chip 1608	AA
R8109	9DK001-50210	J	33k	1/16W	Chip 1608	AA
R8110	9DK001-50165	J	100	1/16W	Chip 1608	AA
R8112	9DK001-50191	J	150	1/16W	Chip 1608	AB
R8113	9DK001-50197	J	2.7k	1/16W	Chip 1608	AB
R8114	9DK001-50161	J	47	1/16W	Chip 1608	AA
R8115	9DK001-50196	J	1.1k	1/16W	Chip 1608	AB
R8116	9DK001-50208	J	12k	1/16W	Chip 1608	AA
R8117	9DK001-50165	J	100	1/16W	Chip 1608	AA
R8118	9DK001-50185	J	10k	1/16W	Chip 1608	AA
R8119	9DK001-50219	J	47k	1/16W	Chip 1608	AA
R8120	9DK001-50219	J	47k	1/16W	Chip 1608	AA
R8121	9DK001-50219	J	47k	1/16W	Chip 1608	AA
R8122	9DK001-50149	J	0	1/16W	Chip 1608	AB
R8124	9DK001-50149	J	0	1/16W	Chip 1608	AB
R8126	9DK001-50149	J	0	1/16W	Chip 1608	AB
R8128	9DK001-50111	J	75	1/4W	Chip 3216	AB
R8129	9DK001-50111	J	75	1/4W	Chip 3216	AB
R8130	9DK001-50111	J	75	1/4W	Chip 3216	AB
R8136	9DK001-50177	J	1.0k	1/16W	Chip 1608	AA
R8137	9DK001-50177	J	1.0k	1/16W	Chip 1608	AA
R8156	9DK001-50181	J	3.3k	1/16W	Chip 1608	AA
R8158	9DK001-50181	J	3.3k	1/16W	Chip 1608	AA
R8160	9DK001-50149	J	0	1/16W	Chip 1608	AB
R8161	9DK001-51038	J	47	1/16W	Resistor Array	AA
R8162	9DK001-51038	J	47	1/16W	Resistor Array	AA
R8163	9DK001-51038	J	47	1/16W	Resistor Array	AA
R8164	9DK001-51038	J	47	1/16W	Resistor Array	AA
R8165	9DK001-51038	J	47	1/16W	Resistor Array	AA
R8166	9DK001-51038	J	47	1/16W	Resistor Array	AA
R8167	9DK001-51038	J	47	1/16W	Resistor Array	AA
R8168	9DK001-51038	J	47	1/16W	Resistor Array	AA
R8169	9DK001-51038	J	47	1/16W	Resistor Array	AA
R8170	9DK001-50181	J	3.3k	1/16W	Chip 1608	AA
R8171	9DK001-51038	J	47	1/16W	Resistor Array	AA
R8172	9DK001-50181	J	3.3k	1/16W	Chip 1608	AA
R8173	9DK001-50181	J	3.3k	1/16W	Chip 1608	AA
R8174	9DK001-51038	J	47	1/16W	Resistor Array	AA
R8175	9DK001-51038	J	47	1/16W	Resistor Array	AA
R8176	9DK001-51038	J	47	1/16W	Resistor Array	AA
R8177	9DK001-51038	J	47	1/16W	Resistor Array	AA

CPCi-0050CE01/03
PC I/F UNIT (Continued)

Ref. No.	Part No.	★	Description		Code
R8178	9DK001-50149	J	0	1/16W Chip 1608	AB
R8180	9DK001-50185	J	10k	1/16W Chip 1608	AA
R8181	9DK001-50185	J	10k	1/16W Chip 1608	AA
R8182	9DK001-50181	J	3.3k	1/16W Chip 1608	AA
R8183	9DK001-50181	J	3.3k	1/16W Chip 1608	AA
R8184	9DK001-50150	J	10	1/16W Chip 1608	AA
R8185	9DK001-50161	J	47	1/16W Chip 1608	AA
R8186	9DK001-50161	J	47	1/16W Chip 1608	AA
R8187	9DK001-51038	J	47	1/16W Resistor Array	AA
R8188	9DK001-50257	J	75	1/16W Chip 1608	AA
R8189	9DK001-51038	J	47	1/16W Resistor Array	AA
R8190	9DK001-50218	J	20k	1/16W Chip 1608	AA
R8191	9DK001-51038	J	47	1/16W Resistor Array	AA
R8192	9DK001-50161	J	47	1/16W Chip 1608	AA
R8193	9DK001-51038	J	47	1/16W Resistor Array	AA
R8194	9DK001-51038	J	47	1/16W Resistor Array	AA
R8195	9DK001-51038	J	47	1/16W Resistor Array	AA
R8196	9DK001-50185	J	10k	1/16W Chip 1608	AA
R8197	9DK001-50161	J	47	1/16W Chip 1608	AA
R8198	9DK001-50161	J	47	1/16W Chip 1608	AA
R8199	9DK001-50161	J	47	1/16W Chip 1608	AA
R8200	9DK001-50185	J	10k	1/16W Chip 1608	AA
R8201	9DK001-50177	J	1.0k	1/16W Chip 1608	AA
R8202	9DK001-50177	J	1.0k	1/16W Chip 1608	AA
R8203	9DK001-50185	J	10k	1/16W Chip 1608	AA
R8205	9DK001-50043	J	56	1/8W Chip 2125	AB
R8206	9DK001-50165	J	100	1/16W Chip 1608	AA
R8207	9DK001-50126	J	180	1/8W Chip 2125	AA
R8209	9DK001-50185	J	10k	1/16W Chip 1608	AA
R8211	9DK001-50043	J	56	1/8W Chip 2125	AB
R8212	9DK001-50165	J	100	1/16W Chip 1608	AA
R8213	9DK001-50126	J	180	1/8W Chip 2125	AA
R8214	9DK001-50149	J	680	1/8W Chip 2125	AB
R8215	9DK001-50264	J	680	1/16W Chip 1608	AD
R8216	9DK001-50155	J	3.0k	1/16W Chip 1608	AB
R8217	9DK001-50185	J	10k	1/16W Chip 1608	AA
R8218	9DK001-50222	J	1.3k	1/16W Chip 1608	AB
R8220	9DK001-50043	J	56	1/8W Chip 2125	AB
R8221	9DK001-50165	J	100	1/16W Chip 1608	AA
R8222	9DK001-50126	J	180	1/8W Chip 2125	AA
R8223	9DK001-51038	J	47	1/16W Resistor Array	AA
R8225	9DK001-50161	J	47	1/16W Chip 1608	AA
R8228	9DK001-50149	J	0	1/16W Chip 1608	AB
R8230	9DK001-50149	J	0	1/16W Chip 1608	AB
R8231	9DK001-50149	J	0	1/16W Chip 1608	AB
R8234	9DK001-50161	J	47	1/16W Chip 1608	AA
R8235	9DK001-50161	J	47	1/16W Chip 1608	AA
R8236	9DK001-50238	J	6.8k	1/16W Chip 1608	AA
R8238	9DK001-50161	J	47	1/16W Chip 1608	AA
R8240	9DK001-50149	J	0	1/16W Chip 1608	AB
R8241	9DK001-51038	J	47	1/16W Resistor Array	AA
R8242	9DK001-50185	J	10k	1/16W Chip 1608	AA
R8243	9DK001-50267	J	33	1/16W Chip 1608	AD
R8244	9DK001-50267	J	33	1/16W Chip 1608	AD
R8245	9DK001-50267	J	33	1/16W Chip 1608	AD
R8301	9DK001-50150	J	10	1/16W Chip 1608	AA
R8302	9DK001-50247	J	510	1/16W Chip 1608	AB
R8303	9DK001-50247	J	510	1/16W Chip 1608	AB
R8304	9DK001-50247	J	510	1/16W Chip 1608	AB
R8305	9DK001-50247	J	510	1/16W Chip 1608	AB
R8306	9DK001-50285	J	33	1/16W Chip 1608	AA
R8307	9DK001-50284	J	300	1/16W Chip 1608	AA
R8308	9DK001-50287	J	82	1/16W Chip 1608	AA
R8309	9DK001-50281	J	200	1/16W Chip 1608	AA
R8310	9DK001-50247	J	510	1/16W Chip 1608	AB
R8311	9DK001-50247	J	510	1/16W Chip 1608	AB
R8312	9DK001-50286	J	75	1/16W Chip 1608	AA
R8313	9DK001-50286	J	75	1/16W Chip 1608	AA
R8314	9DK001-50149	J	0	1/16W Chip 1608	AB
R8316	9DK001-50285	J	33	1/16W Chip 1608	AA
R8317	9DK001-50283	J	240	1/16W Chip 1608	AA
R8318	9DK001-50280	J	100	1/16W Chip 1608	AA
R8319	9DK001-50282	J	220	1/16W Chip 1608	AA
R8324	9DK001-50149	J	0	1/16W Chip 1608	AB
R8325	9DK001-50149	J	0	1/16W Chip 1608	AB
R8327	9DK001-50113	J	0	1/4W Chip 3216	AB
R8329	9DK001-50176	J	820	1/16W Chip 1608	AA
R8331	9DK001-50185	J	10k	1/16W Chip 1608	AA
R8332	9DK001-50185	J	10k	1/16W Chip 1608	AA
R8333	9DK001-50185	J	10k	1/16W Chip 1608	AA
R8335	9DK001-50113	J	0	1/4W Chip 3216	AB
R8400	9DK001-50149	J	0	1/16W Chip 1608	AB
R8401	9DK001-50149	J	0	1/16W Chip 1608	AB
R8402	9DK001-50149	J	0	1/16W Chip 1608	AB
R8408	9DK001-50256	J	1.6k	1/16W Chip 1608	AB
R8409	9DK001-50237	J	1.0k	1/16W Chip 1608	AA
R8600	9DK001-50062	J	1.0k	1/8W Chip 2125	AB
R8601	9DK001-50149	J	0	1/16W Chip 1608	AB
R8602	9DK001-50090	J	1.2k	1/8W Chip 2125	AB

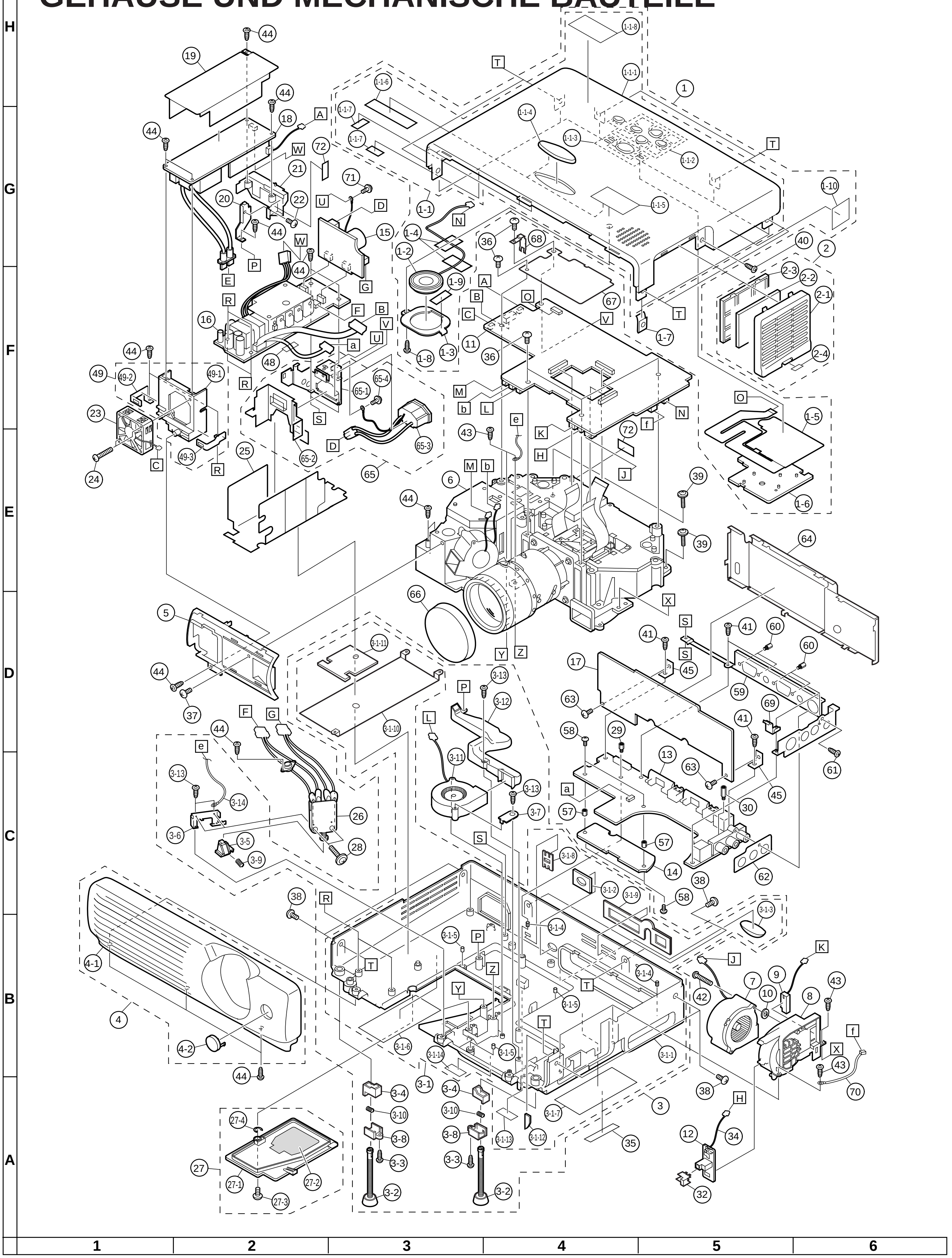
MISCELLANEOUS PARTS

Ref. No.	Part No.	★	Description	Code
FB8004	9DK001-81056	J	Ferrite Bead, BLM11A102S	AD
P8001	9DK001-60050	J	Connector120pin	AU
P8003	9DK001-60051	J	Connector80pin	AR
P8006	9DK001-60062	J	Connector	AU
RMC8001	RRMCU0239CEZZ	J	Remote reciever	AG
	PSLDM4665CEFW	J	Shield case	AG

CABINET AND MECHANICAL PARTS

Ref. No.	Part No.	★	Description	Code
1	*Not Available*	-	Top Panel Ass'y	—
1-1	DBDYT1194CE01	J	Top Panel Ass'y (PG-C20XU)	BC
1-1	DBDYT1201CE01	J	Top Panel Ass'y (PG-C20XE)	BH
1-1-1	*Not Available*	-	Top Panel	—
1-1-2	JBTN-2059CEKA	J	Key Top	AL
1-1-3	*Not Available*	-	LED Cover	
1-1-4	GCOVA1913CESA	J	Badge	AP
1-1-5	HiNDP5799CESA	J	Caution Label	AD
1-1-6	PSPAZ0423CEZZ	J	Spacer, x2	AB
1-1-7	PSPAZ0424CEZZ	J	Spacer, x3	AA
1-1-8	HiNDP5459CESA	J	IQ Label (PG-C20XU)	AD
1-2	VSP0028P-448N	J	Speaker	AN
1-3	LANGS0135CEFW	J	Speaker Angle	AD
1-4	PSPAT0010CEZZ	J	Teflon tape, x2	AA
1-5	QSW-Z0529CEZZ	J	Control Key	AU
1-6	LHLDZ2160CEKZ	J	Control Key Holder	AD
1-7	LX-NZ3172CEFJ	J	Nut, x6	AD
1-8	XEBSD26P06000	J	Screw	AA
1-9	PSPAZ0193CEZZ	J	Spacer	AB
2	CCOVA1909CE01	J	Intake Cover Ass'y	AL
2-1	*Not Available*	-	Intake Cover	—
2-2	PFiLD0085CEZZ	J	Intake Filter	AD
2-3	LHLDZ2161CEKZ	J	Filter Holder	AE
2-4	PSPAZ0416CEZZ	J	Spacer	AD
3	*Not Available*	-	Bottom Panel Ass'y	—
3-1	DBDYU1122CE01	J	Bottom Panel Ass'y (PG-C20XU)	BE
3-1	DBDYU1129CE01	J	Bottom Panel Ass'y (PG-C20XE)	BM
3-1-1	*Not Available*	-	Bottom Panel	—
3-1-2	GCOVA1925CESA	J	R/C Receiver Cover(Rear)	AD
3-1-3	GLEGG9091CEZZ	J	Gum Foot	AD
3-1-4	LX-NZ3177CEFW	J	Nut, x2	AD
3-1-5	LX-NZ3178CEFW	J	Nut, x3	AD
3-1-6	HiNDP5663CESA	J	Caution Label (BQC)	AG
3-1-7	HiNDP5653CEZZ	J	Model Label (PG-C20XU)	AN
3-1-7	HiNDP5728CEZZ	J	Model Label (PG-C20XE)	AN
3-1-8	LHLDZ2172CEKZ	J	Plate	AA
3-1-9	PFiLD0127CEKZ	J	Rear Filter	AE
3-1-10	PSLDM4668CEZZ	J	Power Shield (PG-C20XU)	AK
3-1-11	PSPAG0383CEZZ	J	Rubber Spacer	AE
3-1-12	PSPAK0032CEKZ	J	Spacer	AB
3-1-13	HiNDP5661CESA	J	PCC Label (PG-C20XU)	AF
3-1-13	HiNDP5662CESA	J	4 Lang. Label (PG-C20XE)	AF
3-1-14	HiNDP5771CESA	J	Label	AE
3-2	GLEGP9131CEKA	J	Foot, x2	AK
3-3	XEBSN26P10000	J	Screw, x2	AA
3-4	JBTN-2060CEKA	J	Adjuster Lever, x2	AD
3-5	JBTN-2061CEKZ	J	Switch Lever	AE
3-6	LANGQ0104CEFW	J	Angle	AF
3-7	LANGU9076CEFW	J	Fan Angle	AD
3-8	LHLDZ2164CEKA	J	Adjuster Holder, x2	AG
3-9	MSPRC0208CEFW	J	Spring	AB
3-10	MSPRC0209CEFW	J	Spring, x2	AB
3-11	NFANS0023CE00	J	PBS Fan	AY
3-12	PDUC-0128CEKZ	J	Center Duct	AV
3-13	XEBSD26P06000	J	Screw, x4	AA
3-14	QCNW-5944CEZZ	J	Earth Lead	AB
4	*Not Available*	-	Front panelAss'y	—
4-1	CBDYF1113CE01	J	Front panel (PG-C20XU)	AV
4-1	CBDYF1121CE01	J	Front panel (PG-C20XE)	BD
4-2	GCOVA1911CESA	J	R/C Receiver Cover (Front)	AB
5	CDUC-0132CE01	J	Front Duct Ass'y	AN
6	*Refer to Optics Mechanism Parts*			
7	NFANS0022CE00	J	Intake Fan	AY
8	PDUC-0124CEKA	J	Intake Duct	AG
9	QCNW-5933CEZZ	J	Leaf Switch	AG
10	XWHSD32-05080	J	Washer	AA
11	—	-	Output Unit	—
12	—	-	R/C Unit	—
13	—	-	Input Unit	—
14	—	-	3D Y/C Separation Unit	—
15	—	-	Inlet Unit	—
16	—	-	Power Unit	—
17	—	-	PC I/F Unit	—
18	RDENC0319CEZZ	J	Ballast Unit	CB
19	PZETK0136CEKZ	J	Ballast Cover	AL
20	LANGU9079CEFW	J	Angle	AE
21	LHLDZ2163CEKZ	J	Holder	AF
22	XBBSN26P04000	J	Screw	AA
23	NFANR0115CE00	J	Cooling Fan	AX
24	XEBSF30P20000	J	Screw, x2	AB
25	PZETK0137CEKZ	J	Power Unit Cover	AN
⚠ 26	QCNW-5946CEZZ	J	AC Select Switch	AZ
27	CCOVA1970CE01	J	Lamp Cover Ass'y	AR
27-1	*Not Available*	-	lamp Cover	—
27-2	*Not Available*	-	Punching net	—
27-3	LX-BZ3439CEFN	J	Screw	AD
27-4	XREUW20-04000	J	E-ring	AA
28	XBPSD30P16WS0	J	Screw, x2	AA
29	NSFTZ0169CEFW	J	Shaft	AD
30	NSFTZ0170CEFW	J	Shaft	AD
32	PSLDC3111CEFW	J	Shield (PG-C20XU)	AE
34	QCNW-5771CEZZ	J	R/C Lead	AF
35	TLABN0274CEZZ	J	Serial No. Label(PG-C20XU)	AB
35	TLABN0310CEZZ	J	Serial No. Label(PG-C20XE)	AB
36	LX-BZ3248CEFD	J	Screw, x5	AA
37	XBBSF26P08000	J	Screw	AA
38	XBBSN30P06000	J	Screw, x6	AA
39	XBPSD26P10JS0	J	Screw, x2	AA
40	XEBSC20P06000	J	Screw	AA
41	XEBSD26P06000	J	Screw, x4	AA
42	XEBSD30P30000	J	Screw	AB
43	XEBSF26P10000	J	Screw, x4	AA
44	XEBSN26P08000	J	Screw, x16	AA
45	LANGU9074CEFW	J	Angle, x2	AD
48	PSPAT0020CEZZ	J	Teflon tape	AD
49	CHLDZ2162CE01	J	Holder Ass'y	AM
49-1	*Not Available*	-	Holder	—
49-2	*Not Available*	-	Angle	—
49-3	*Not Available*	-	Angle	—
57	NSFTZ0175CEFW	J	Shaft, x2	AC
58	XBBSD20P03000	J	Screw, x4	AA
59	PSLDC3112CESA	J	Connector Panel	AQ
60	NSFTZ0134CEFW	J	Nut, x4	AD
61	XEBSN26P06000	J	Screw	AA
62	PSLDM4652CEFW	J	Shielding Plate	AF
63	XBBSD26P05000	J	Screw, x2	AA
64	PSLDM4665CEFW	J	Shield case (PG-C20XU)	AF
65	CCNW-5817CE02	J	Inlet Socket Ass'y	AS
65-1	LANGU9073CEFW	J	Angle	AK
65-2	PZETK0120CEKZ	J	Insulation Cover	AK
65-3	QCNW-5817CEZZ	J	Inlet Socket	AQ
65-4	XBPSD40P06JS0	J	Screw	AA
66	PCOVZ1095CEKA	J	Lens Cap	AD
67	PSLDC0105CEZZ	J	Electrostatic Shield (PG-C20XU)	AE
68	QEARP0122CEFW	J	Earth (PG-C20XU)	AD
69	QEARP0123CEFW	J	Earth (PG-C20XU)	AD
70	RH-HZ0090CEZZ	J	Thermistor	AL
71	XBPSD40P05J00	J	Screw (Yellow)	AA
72	PSPAT0010CEZZ	J	Teflon Tape	AA

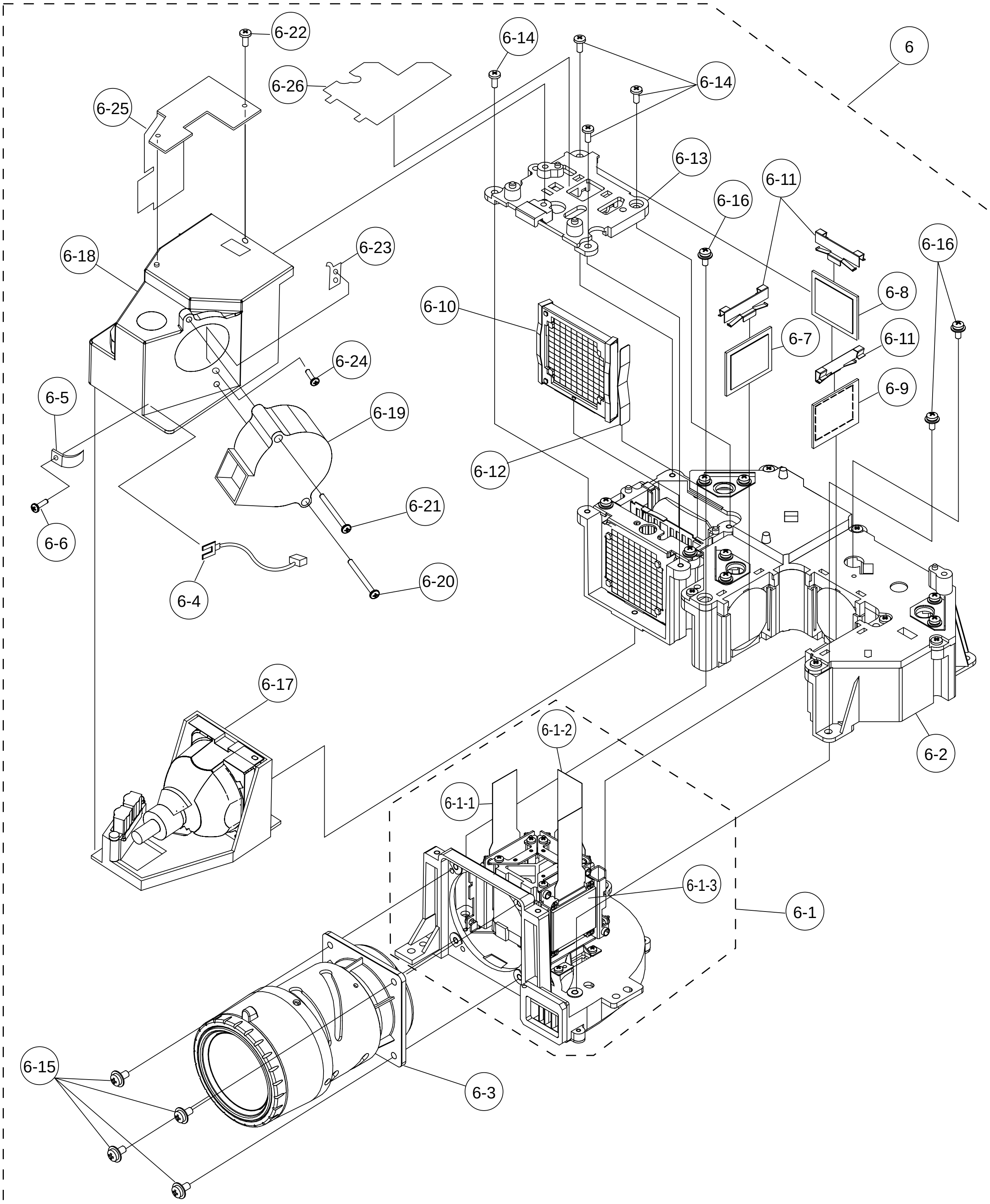
CABINET AND MECHANICAL PARTS/ GEHÄUSE UND MECHANISCHE BAUTEILE



OPTICS MECHANISM PARTS

Ref. No.	Part No.	★	Description	Code
6	CCHSK0096CE01	J	Optics Mechanism Ass'y	FD
6-1	CCHSK0083CE01	J	Prizm Holder Unit	ES
6-1-1	*Not Available*	-	R-LCD Display	—
6-1-2	*Not Available*	-	G-LCD Display	—
6-1-3	*Not Available*	-	B-LCD Display	—
6-2	CCHSK0100CE01	J	Illumination unit	DF
6-3	CLNS-0235CE01	J	Projection Lens Ass'y	CR
6-4	QCNW-5929CEZZ	J	Thermo Fuse	AG
6-5	LANGT0112CEFW	J	Spring	AF
6-6	XEBSD26P06000	J	Screw	AA
6-7	PFiLW0289CEZZ	J	Polarizer Input Filter R	BD
6-8	PFiLW0290CEZZ	J	Polarizer Input Filter G	BD
6-9	PFiLW0291CEZZ	J	Polarizer Input Filter B	BK
6-10	PLNS-0237CEZZ	J	PBS Lens Array	CG
6-11	LANGT0113CEFW	J	Polarizer Input Filter Spring x3	AK
6-12	LANGT0115CEFW	J	PBS Spring	AM
6-13	PCOVZ1098CEKZ	J	PBS Cover	AZ
6-14	XBPSD25P06000	J	Screw X 4	AA
6-15	XBPSD30P08KS0	J	Screw X 4	AA
6-16	XBPSD30P06JS0	J	Screw X 3	AA
⚠ 6-17	BQC-PGC20X//1	J	Lamp Ass'y	CQ
6-18	PDUC-0125CEKZ	J	Lamp Duct	AP
6-19	NFANS0022CE00	J	Lamp Fan	AY
6-20	XBPSD30P30WS0	J	Screw	AA
6-21	XEBSD30P30000	J	Screw	AB
6-22	XBBSF26P08000	J	Screw	AA
6-23	LANGT0111CEFW	J	Fan fixing Angle	AE
6-24	XAPSD20P02000	J	Screw	AA
6-25	PSLDH0104CEK0	J	Shield	AQ
6-26	PCOVU0106CEK0	J	Cover	AM

OPTICS MECHANISM PARTS/
TEILE FÜR OPTIKMECHANISMUS



SUPPLIED ACCESSORIES

Ref. No.	Part No.	★	Description	Code
	PFiLD0123CEZZ	J	Extra Air Filter	AD
⚠	CACCU5013CEZZ	J	AC Cord (For US. and Canada)	AX
⚠	QACCV4002CEZZ	J	AC Cord (For Europe)	AZ
⚠	QACCB5024CENA	J	AC Cord (For U.K. and Hong Kong)	AZ
	QCNW-4870CEZZ	J	Computer Audio Cable	AQ
	QCNW-5113CEZZ	J	PS/2 Mouse Control Cable	AN
	QCNW-5288CEZZ	J	DIN D-Sub RS-232C Cable	AM
	QCNW-5680CEZZ	J	USB Mouse Control Cable	AP
	QCNWG0002CEZZ	J	Computer RGB Cable	AW
	RRMCG1613CESA	J	R/C Unit	BK
	RUNTK0694CEZZ	J	Remote Mouse Receiver	BK
	UDSKA0029CEN1	J	CD-ROM (PG-C20XU)	AQ
	UDSKA0048CEN1	J	CD-ROM (PG-C20XE)	AQ
	TiNS-7204CEZZ	J	Operation Manual (PG-C20XU)	AT
	TiNS-7271CEZZ	J	Operation Manual (PG-C20XE)	AZ
	TiNS-7205CEZZ	J	Quick Reference Guide (for US. and Canada)	AG
	TiNS-7272CEZZ	J	Quick Reference Guide (PG-C20XE)	AH
	TiNS-7284CEZZ	J	Quick Reference Guide (PG-C20XE)	AH
	TiNS-7285CEZZ	J	Quick Reference Guide (PG-C20XE)	AG
	PCOVZ1095CEKA	J	Lens cap	AE
	UBNDT0013CEZZ	J	Lens cap strap	AF

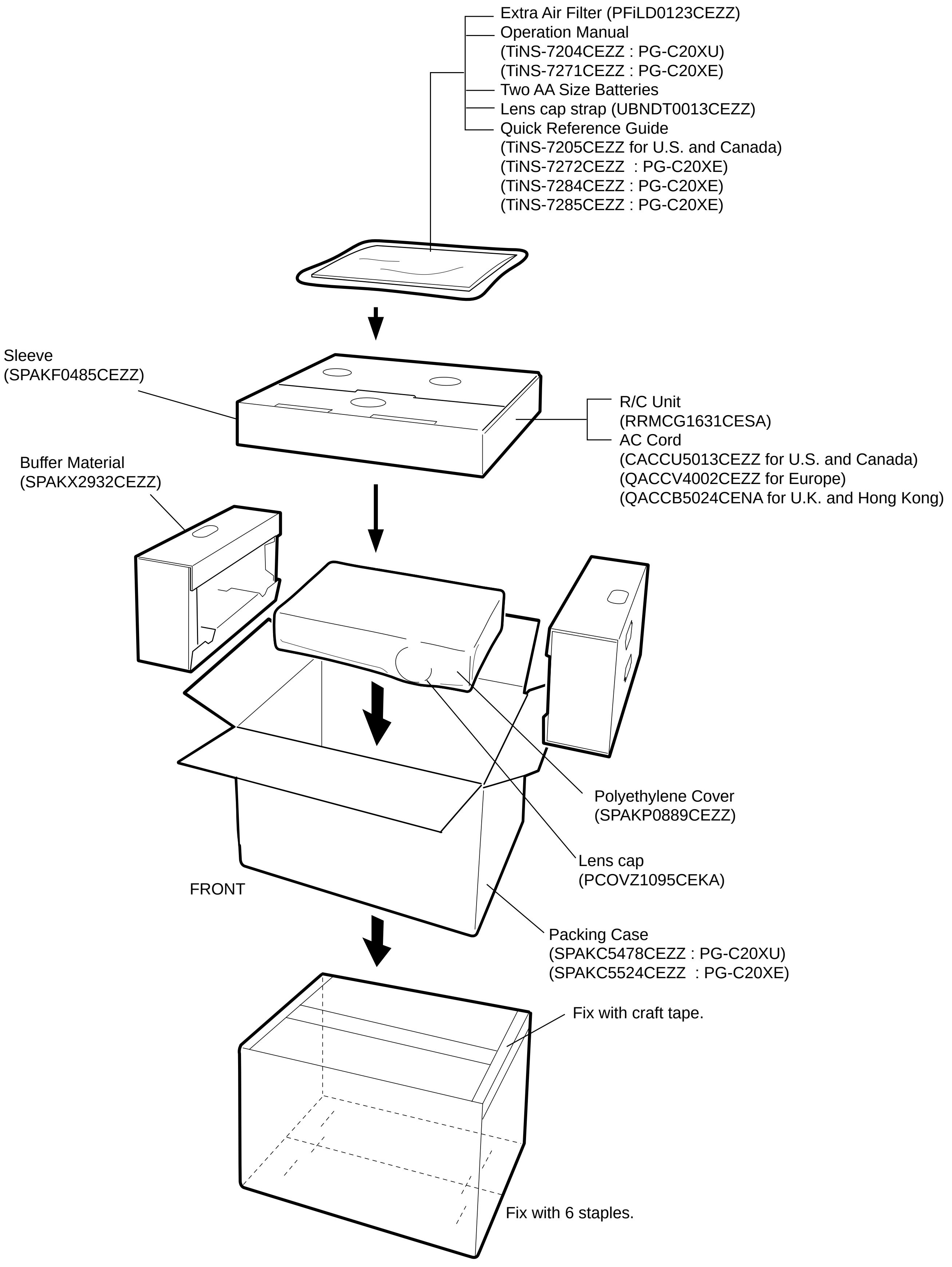
ACCESSORIES (NOT REPLACEMENT ITEM)

Ref. No.	Part No.	★	Description	Code
	TCAUH1133CEZZ	–	Operation Caution (PG-C20XU)	—
	TCAUZ3033CEZZ	–	Caution card (PG-C20XU)	—
	—	–	Two AA Size Batteries	—

PACKING PARTS
(NOT REPLACEMENT ITEM)

Ref. No.	Part No.	★	Description	Code
	SPAKC5478CEZZ	–	Packing Case (PG-C20XU)	—
	SPAKC5524CEZZ	–	Packing Case (PG-C20XE)	—
	SPAKP0889CEZZ	–	Polyethylene Cover	—
	SPAKX2932CEZZ	–	Buffer Material	—
		–	Sleeve(Box for Accessories)	—
	SSAKA0170CEZZ	–	Bag for Accessories	—
	TLABK0001TAZZ	–	Number Card	—

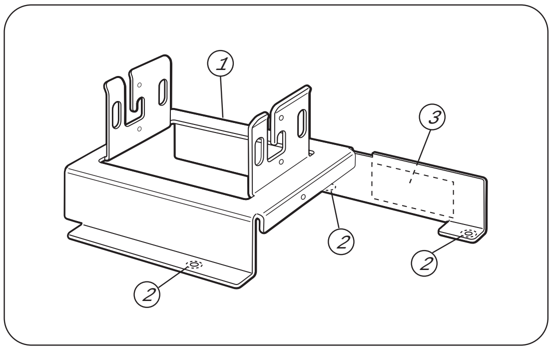
PACKING OF THE SET / VERPACKEN DES GERÄTS



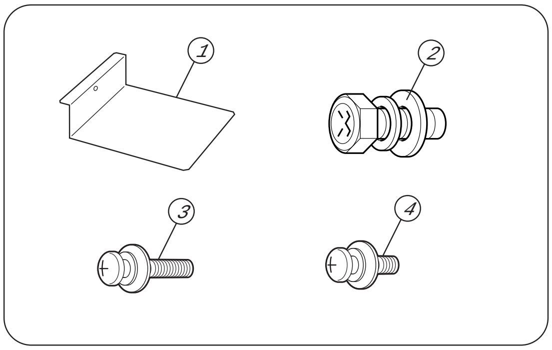
ATTACHMENT ADAPTOR / ANSCHLUSSADAPTER

AN-Z7T

1. MECHANICAL PARTS



2. ACCESSORIES



PARTS LIST

PARTS REPLACEMENT

Parts marked with "⚠" are important for maintaining the safety of the set. Be sure to replace these parts with specified ones for maintaining the safety and performance of the set.

"HOW TO ORDER REPLACEMENT PARTS"

To have your order filled promptly and correctly, please furnish the following informations.

1. MODEL NUMBER 2. REF. NO.
3. PART NO. 4. DESCRIPTION
5. CODE 6. QUANTITY

in **USA**: Contact your nearest SHARP Parts Distributor.
For location of SHARP Parts Distributor,
Please call Toll-Free; 1-800-BE-SHARP

in **CANADA**: Contact SHARP Electronics of Canada Limited
Phone (416) 890-2100.

ERSATZTEILLISTE

AUSTAUSCH VON TEILEN

Ersatzteile, die besondere Sicherheitseigenschften haben, sind in dieser Anleitung markiert. Elektrische Komponenten mit solchen Eigenshaften sind in den Ersatzteil durch "⚠" gekenn-zeichnet. Der Gebrauch von Ersatzteilen, die nicht deselben Sicherheits-eigenschaften haben wie die vom Hersteller empfohlenen ud in der Bedienungsanleitung angegebenen, können zur Ursache von Blitzeinschlägen, Bränden und anderen Gefahren werden.

"WIE MAN ERSATSTEILE BESTELLT"

Damit Ihre Bestellung promt und korrekt ausgeführt wird, geben Sie bitte folgende Informationen.

1. MODELL NR. 2. REF. NR.
3. ERSATZTEIL NR. 4. BESCHREIBUNG
5. KODE 6. QUANTITÄT

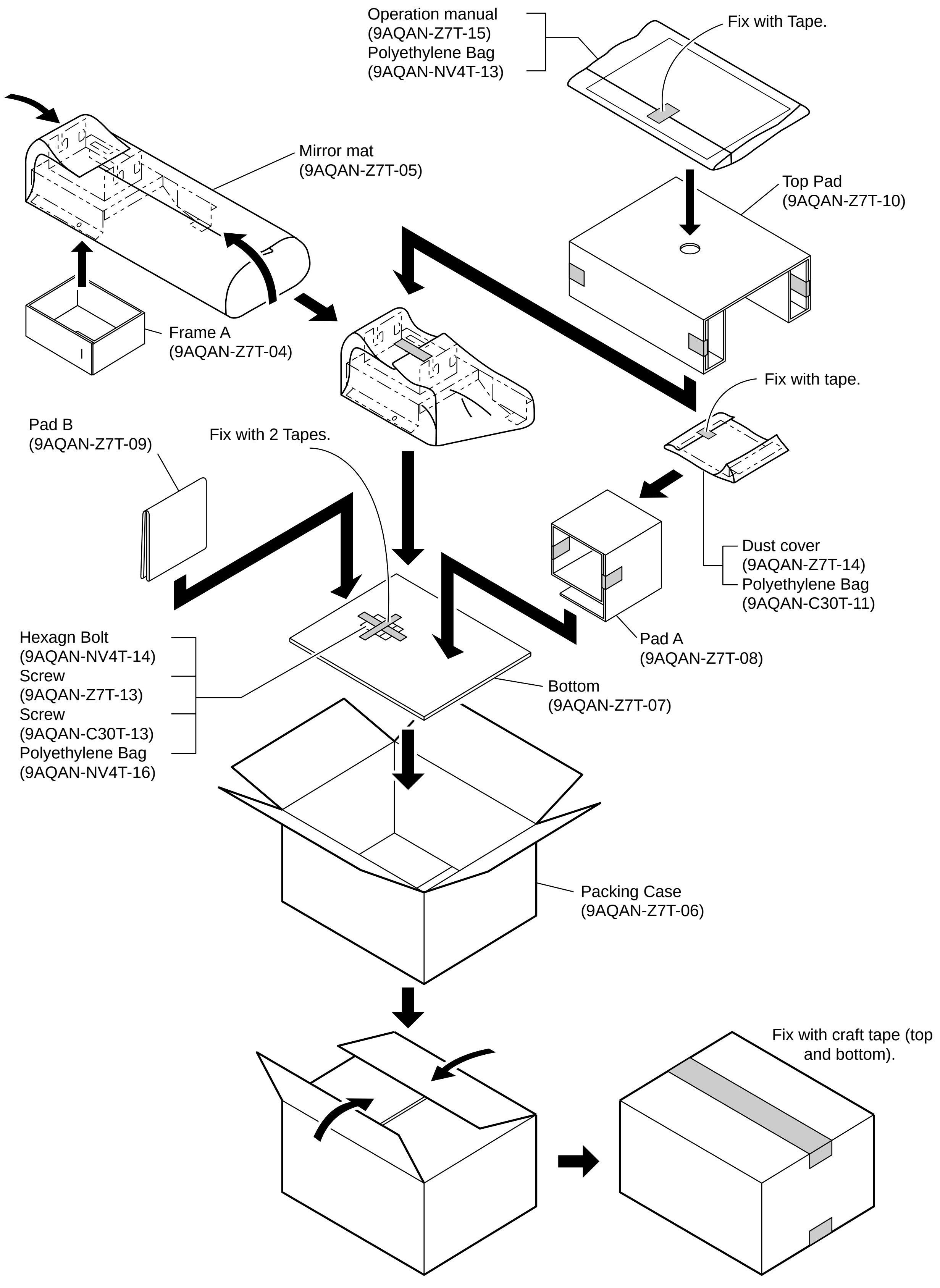
★ MARK: SPARE PARTS-DELIVERY SECTION

Ref. No.	Part No.	★	Description	Code
MECHANICAL PARTS				
1	9AQAN-Z7T-01	J	Attachment Adaptor	BM
2	9AQAN-Z7T-03	J	Spacer	AN
3	9AQAN-Z7T-02	J	Model Label	AN
ACCESSORIES				
1	9AQAN-Z7T-14	J	Dust Cover	AQ
2	9AQAN-NV4T-14	J	Hexagon Bolt	AN
3	9AQAN-Z7T-13	J	Screw	AM
4	9AQAN-C30T-13	J	Screw	AM

★ MARKIERUNG : ERSATZTEILE-LIEFERUNG

Ref. No.	Part No.	★	Description	Code
SUPPLIED ACCESSORIES				
	9AQAN-Z7T-15	J	Operation Manual	AU
	9AQAN-NV4T-13	J	Polyethylene Bag	AM
	9AQAN-NV4T-16	J	Polyethylene Bag	AM
	9AQAN-C30T-11	J	Polyethylene Bag	AM
PACKING PARTS (NOT REPLACEMENT ITEM)				
	9AQAN-Z7T-06	-	Packing case	—
	9AQAN-Z7T-04	-	Flame A	—
	9AQAN-Z7T-05	-	Mirror Mat	—
	9AQAN-Z7T-07	-	Bottom Pad	—
	9AQAN-Z7T-08	-	Pad A	—
	9AQAN-Z7T-09	-	Pad B	—
	9AQAN-Z7T-10	-	Top Pad	—

PACKING OF THE SET / VERPACKEN DES GERÄTS



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SY. KY

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